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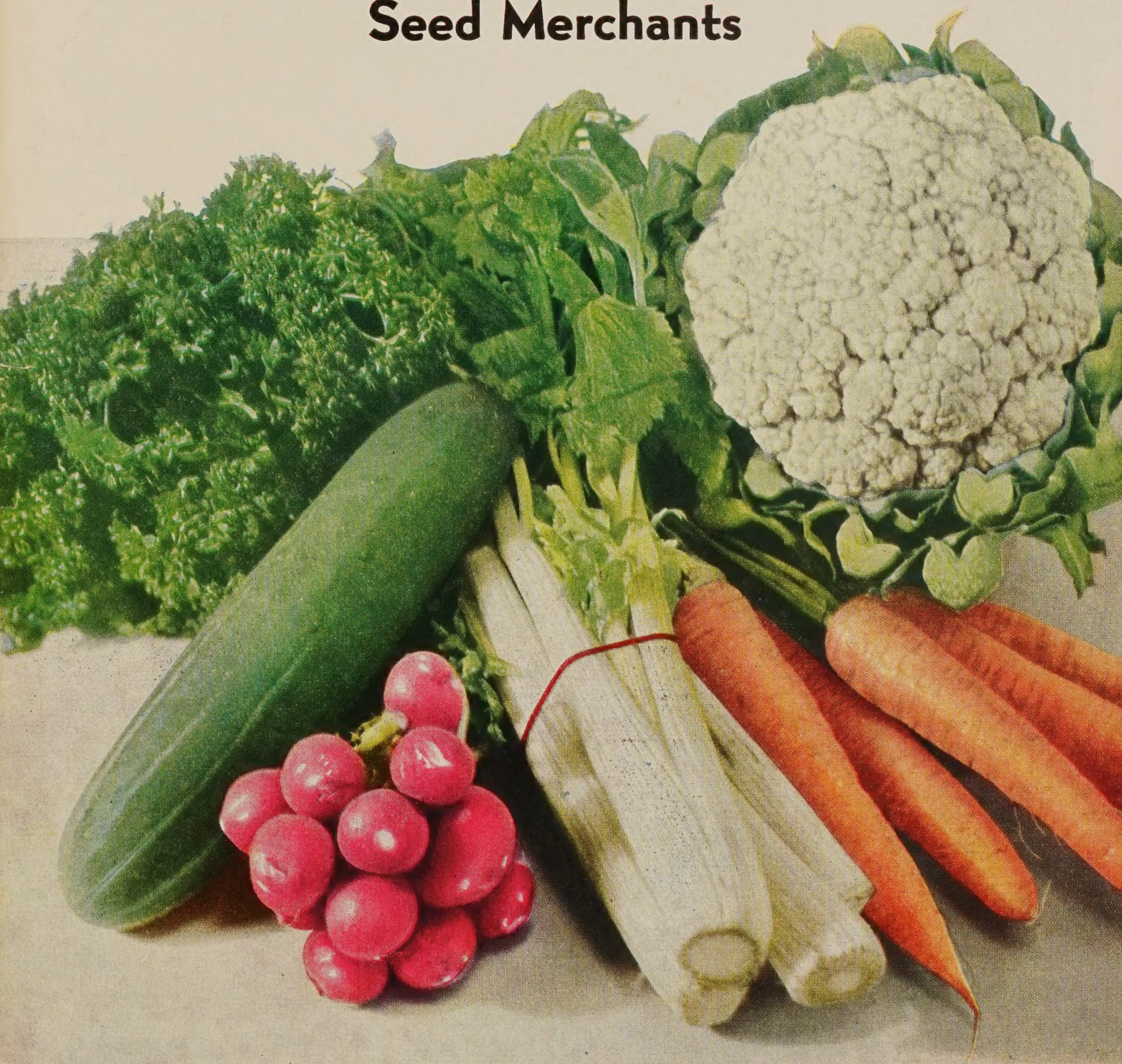
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1952 SEED ANNUAL

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U. S. Department of Agriculture

# Grand Rapids Growers, Inc.

Seed Merchants



401-403 IONIA AVE., S. W.

GRAND RAPIDS, MICH.



# Forcing Varieties

## The Most Dependable Seed for Greenhouse Crops

THESE VARIETIES are used in all parts of the country by the best and largest growers in the business. If you are not familiar with these varieties, give us a trial order and get acquainted with their merits. Below we give you a partial description, with complete text found in the pages of this catalog. We have appreciated a nice business on our forcing varieties and an order from you will be filled the same day received.



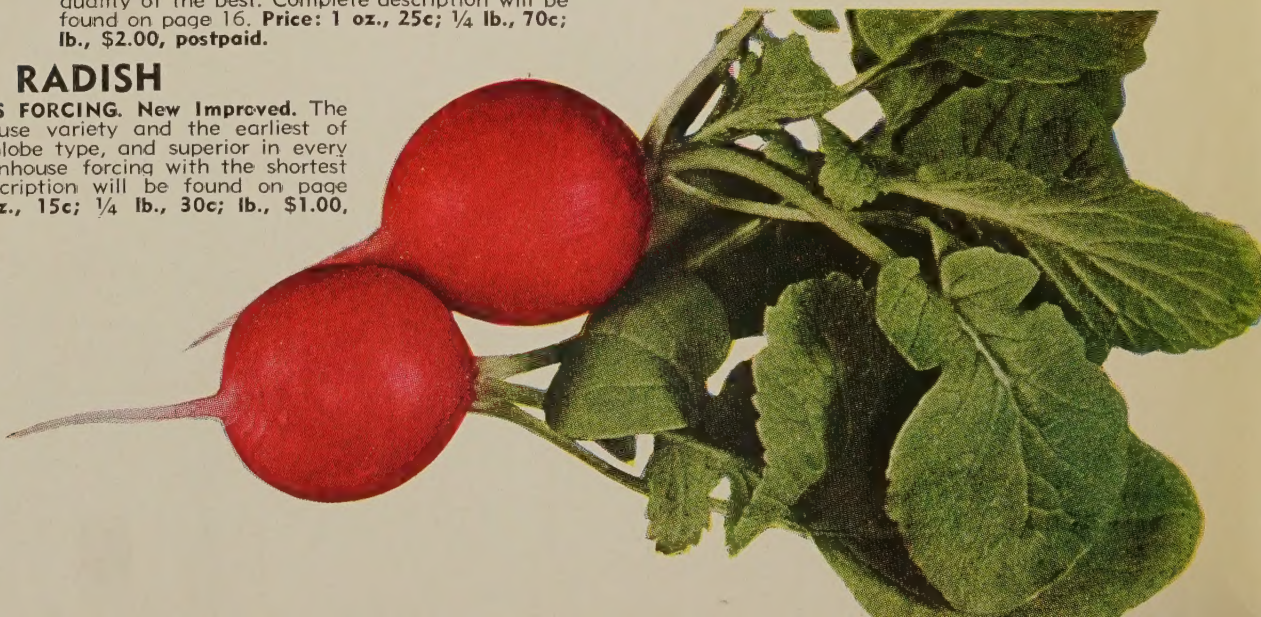
### LETTUCE

#### GRAND RAPIDS FORCING. (Washington Strain.)

A splendid forcing strain. Color a light green; heads very heavy, leaf crisp, tender and curly; quality of the best. Complete description will be found on page 16. Price: 1 oz., 25c; 1/4 lb., 70c; lb., \$2.00, postpaid.

### RADISH

GRAND RAPIDS FORCING. New Improved. The best greenhouse variety and the earliest of the Scarlet Globe type, and superior in every way for greenhouse forcing with the shortest top. Full description will be found on page 24. Price: Oz., 15c; 1/4 lb., 30c; lb., \$1.00, postpaid.





**PLEASE USE THIS ORDER SHEET**

## NAME \_\_\_\_\_ Date \_\_\_\_\_ 19 \_\_\_\_\_

Write very plainly

Post Office ..... State .....

Street, P. O. Box  
or Rural Delivery

Express or Freight Office (If Different from P. O.) \_\_\_\_\_ Forward Goods by \_\_\_\_\_

Forward Goods by .....  
(Parcel Post, Express, Freight or Boat)

## CASH DISCOUNT

Money Order - - \$.....

Draft or Check - \$.....

Postage Stamps - \$.....

Cash - - - - - \$.....

If your order of VEGETABLE AND FLOWER SEEDS, except PEAS, BEANS or CORN, amounts to \$5.00 or more, we will allow you a 10% cash discount. This discount does not apply on bulbs, special offer collections, plants or any other item listed in this catalog, as these are NET CASH as quoted.

Michigan State Sales Tax is charged on all orders for home gardens, or wherever applicable.

Discount does not apply on Canadian orders, and must be remitted in U. S. funds.

More Order Blanks will be sent upon request. Always write letters on a separate sheet from your order.  
Make Money Orders or Checks payable to Grand Rapids Growers, Inc.

All of our seeds are tested, and we guarantee the vitality and purity to the full amount of the purchase price, but even with our quality seeds, success in gardening and farming depends largely upon cultivation, soil and weather conditions, therefore, in no case can we be held liable for more than the amount actually paid for the seeds.

[illegible]

IF MORE ORDER BLANKS ARE WANTED, WRITE US AND WE WILL SEND THEM. MAIL ORDERS ARE SOLICITED.



**ORDER SHEET — Continued**[illegible]

**SPECIAL NOTICE:** As a special favor, won't you tell your friends about your experience with our seeds? Give us their names and addresses so we may send them our seed annual.

[illegible]



# Grand Rapids Growers, Inc.

## 32nd Annual Seed Catalog

# 1952

### Important

By Carefully Following These Suggestions, Many Mistakes Will Be Avoided

#### Order Blanks

Order blanks have been inserted in this catalog for your convenience. Please use them. Fill in your NAME, POST OFFICE, SHIPPING POINT or nearest EXPRESS OFFICE, your COUNTY and STATE, as this is as important in the prompt filling of your order as the order itself. Write plainly and avoid mistakes. Additional order blanks are mailed with every order. If you do not receive them, please notify us, and we will be glad to furnish them.

#### Terms

We will ask that you send your remittance with your order. ON ALL ORDERS OF VEGETABLE AND FLOWER SEEDS except PEAS, BEANS and CORN, amounting to \$5.00 or more, we will allow a

10% cash discount. This discount does not apply on bulbs, special offer collections, plants or any other item listed in this catalog, as these are NET CASH as quoted.

This offer is good only in the United States, and while we do not think there will be any serious changes, ALL PRICES QUOTED ARE SUBJECT TO CHANGE WITHOUT NOTICE, Michigan State Sales Tax will be charged on orders for home gardeners or wherever applicable.

#### How to Send Money

Remittance should be made by POSTAL MONEY ORDER, EXPRESS MONEY ORDER, BANK DRAFT or CERTIFIED CHECK. It is perfectly safe and your order will be assured of prompt handling. U. S. CURRENCY and U. S. POSTAGE STAMPS for small amounts are acceptable but in this case the letter should be REGISTERED.

#### Canadian Customers (Notice)

We are very thankful for the business you have given us in the past and we will continue to give you our very best of service and quality seeds.

Please take special notice that we cannot make C. O. D. shipments to any part of Canada and cannot pay postage on any items of seed in this catalog above the pound rate.

We also ask that you make your remittance in United States funds as the discount on Canadian paper is far in excess of where it was and will not permit us to honor same at face value. You can, however, obtain a bank draft or money order payable in U. S. funds and will ask that you consult your banker or postmaster. Personal checks or currency are not acceptable.

#### Limited Warranty

The Grand Rapids Growers, Inc., warrants to the extent of the purchase price that seeds or bulbs are as described on the container, within recognized tolerances. Seller gives no other or further warranty, express or implied.

#### Small Orders

Small orders are just as welcome as the larger ones and receive the same careful attention and prompt handling. All orders are filled the same day as received.

#### Large Quantities

Parties buying large quantities of any one variety of seed will be quoted special prices on application.

#### Price of Seeds By Weight

We will supply HALF POUNDS and over at the pound rate; less than half pound lots are charged at the quarter pound and ounce rate.

#### Safe Delivery

All seeds and supplies sent out by us are fully insured and we guarantee their safe arrival. If they are damaged, notify us immediately.

#### Postpaid Prices (Important)

We prepay postage on all vegetable and flower seeds in packets, ounces, quarter pounds, half pounds and pounds at the prices quoted herein to any point of the United States or any of its possessions, and Canada; however, we do not pay postage on Beans, Corn and Peas, beyond the one pound price; field seeds. Onion sets, miscellaneous supplies, or anything that is not specifically listed "postpaid." If such items are wanted by parcel post, add sufficient postage as per parcel post rates given below, but in any case, any money that is sent us additional would be refunded immediately when the order is filled or if it is not included, we will short weigh the seeds to cover the actual funds received.

#### Air Mail

On RUSH ORDERS received by air mail, wire or telephone for one ounce or more of seed, we will send by air mail if so requested at a normal charge of 6c per ounce of seed ordered, not exceeding 8 ounces, as the postal rate is 6c per each ounce. One ounce of seed would weigh more than one ounce when it is packed ready to mail. Where the mailing weight is less than one ounce we will pay the postage. On larger quantities the schedule is:

Zones 1 and 2	Per Pound	
	Mailing Weight	Additional Pounds
3	60c	48c
4	60c	48c
5	65c	50c
6	70c	56c
7	75c	64c
8	75c	72c
	80c	80c

This will give you overnight service to almost any point in the continental U. S.

#### Weight Limit

After Feb. 1st, 1952 the length and girth of any package will be limited to 72 inches maximum, and the maximum weight will be cut to 40 lbs. in the first and second zones and a maximum of 20 lbs. in the third to eighth zones, and it might be cheaper to send bulky packages by express beyond the third zone.

#### Parcel Post Rates

Subject to changes still pending.

	1 lb. or fraction thereof	10 lbs.	25 lbs.
Local zone	\$0.15	\$0.27	\$0.45
1st and 2nd zone	.17	.39	.75
3rd zone	.17	.49	1.01
4th zone	.19	.62	1.33
5th zone	.21	.82	1.83
6th zone	.23	1.07	2.45
7th zone	.25	1.29	3.01
8th zone and beyond	.27	1.53	3.63
CANADA, all parts	.14 per lb.		

If in doubt about the rate or postage, consult your local postmaster.

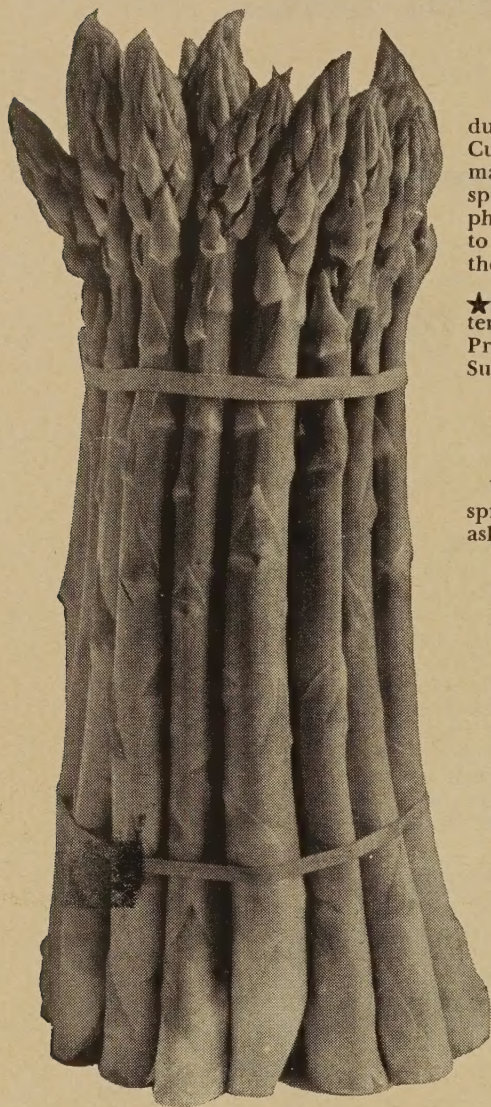
## Grand Rapids Growers, Inc.

### Seed Merchants

Cor. Wealthy and Ionia Ave., S.W.  
Phone: 97216

Grand Rapids, Mich.





Mary Washington Asparagus

## Asparagus

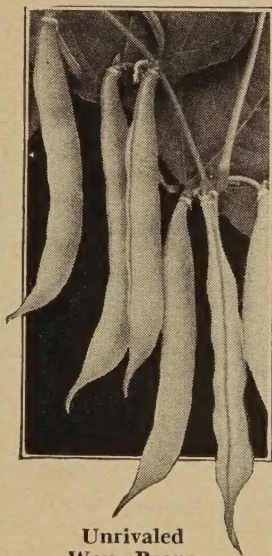
**CULTURAL DIRECTIONS.** One-half ounce of seed will sow 50 feet of drill and produce about 500 plants. Drill the seed in rows about 24 inches apart, covering seed 1 in. Cultivate well, keep free from weeds and they should be all right to transplant to permanent beds the following spring. An application of a good commercial fertilizer in the spring is recommended to avoid weed seed in barnyard manure and an application of phosphate and potash after the cutting period. Do not cut until third year, limit cutting to middle of June. Every fall before the seed is ripe, cut tops and burn them. Remember, the bed well planted will last for at least 20 years, treat it well.

★**MARY WASHINGTON RUST-RESISTANT ASPARAGUS.** The largest and most tender green Asparagus. This is a decided improvement due to the untiring efforts of Prof. J. B. Norton, member of the Plant Breeding Staff of the U. S. Dept. of Agriculture. Suitable for quick freezing.

Prices: Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.

## Asparagus Roots

We have the Palmetto and Mary Washington Rust-Resistant Asparagus roots, every spring, and as we handle only the very best 2-year roots, that are locally grown, we will ask that you write us for prices in whatever quantity you may want.

Unripped  
Wax Beans

## Beans

BEANS are not discounted, the regular list price being "net", and are not postpaid except at the 1 lb. price. Money to cover postage must be included on mail orders or will be weighed to cover the actual funds received.

**CULTURAL DIRECTIONS.** One pound to 100 feet of drill; about three-fourths bushel per acre of Bush Beans. Beans thrive on a rich, warm, light soil. It is not safe to plant until about the middle of May, as the seed will rot in cold, wet ground, and plants will not stand frost. Plant dwarf Beans in rows 2 feet apart and from 4 to 6 inches apart in the row. Lima Beans should not be planted until June first, when the soil is thoroughly warmed through. Limas will rot in cold ground.

## Wax Podded Varieties

★**PENCIL POD BLACK WAX.** Pods are round, very long, tender and entirely stringless. Extremely productive. Best market gardeners sort. Suitable for quick freezing.

**CHEROKEE WAX.** (Valentine Wax). 50 days. Developed from an original selection made by Dr. W. C. Barnes, of South Carolina. The plant is large and erect. Pods golden wax, measuring 6½ inches long, oval, nearly straight, stringless at all stages, tender and of good quality. The most prolific wax podded variety, equal in yield to the best green podded types. Seeds 80 per ounce.

**GOLDEN WAX.** (Top Notch). 52 days. An excellent early home garden variety. Pods clear golden yellow, broad, flat-oval, fleshy, brittle and stringless. Suitable for quick freezing.

★**UNRIVALED WAX BEANS.** 53 days. Small plant, very early and great yielder. Pods about 5½ inches long, somewhat curved, semi-flat, fleshy and very tender and stringless. Color pale yellow.

**ROUND POD KIDNEY WAX.** 58 days. Most generally used as a wax Bean for canning and commercial freezing. Stringless, nearly fibre free, pods make an ideal pack for cut or whole Beans. Color light yellow. 6 inches long.

**KENTUCKY WONDER WAX.** 67 days. Unsurpassed for a wax podded variety. A very heavy producer. Vine 4 to 5 feet tall, good climber, very productive. Pods 7 to 7½ inches long, light golden yellow, thick-flat to oval, good quality. Almost stringless, brittle, tender and fleshy.

**Prices of Beans:** Lb., 50c, postpaid. Not postpaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00



Pencil Pod Black Wax

★This variety recommended by Michigan State College



## Green Podded Varieties

**LANDRETH STRINGLESS GREEN POD.** 53 days. An improvement of Burpee's Stringless Green Pod. Vine is more erect, with darker foliage and a longer, slimmer pod. Pods 6 to 8 inches long, slightly curved, meaty, and absolutely stringless. Undoubtedly the best round-podded Bean on the market today. Very prolific and an ideal variety for home garden, market gardeners and canners. Suitable for quick freezing.

★**TENDERGREEN.** 54 days. A new introduction, and now one of the most popular green Beans. Hardy; dependable cropper, medium large, dark green and stringless. Suitable for quick freezing.

**GIANT STRINGLESS GREEN POD.** 53 days. Similar to Landreth Stringless but pods are a little longer, straighter and more slender, more depressed between Beans and slightly lighter in color; early, hardy and of highest quality.

**BOUNTIFUL.** 48 days. Best of the flat-podded varieties. Pods 6½-7 inches long, thick, flat and slightly curved. Stringless and of fine quality; color light green. Suitable for quick freezing.

**BLACK VALENTINE.** 52 days. A round-podded, stringless shipping and market variety. Pods 6 to 6½ inches long, dark green, slightly curled. Suitable for quick freezing.

**REFUGEE OR 1000 TO 1.** 70 days. A very productive, hardy, vigorous late sort. Pods 5 to 5½ inches long, somewhat slender, round and slightly curved, almost stringless and of good quality; color light green. Suitable for quick freezing.



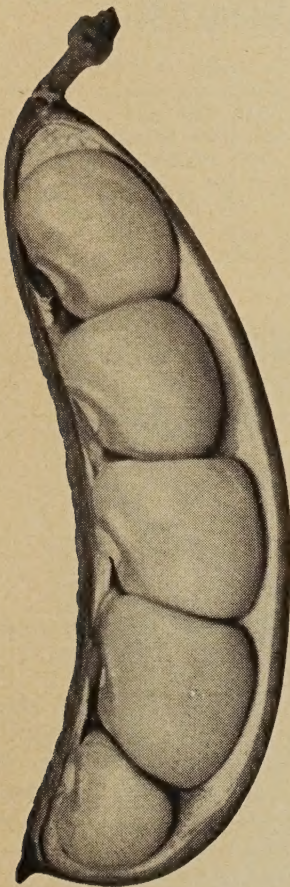
Landreth Stringless Green Pod

**KENTUCKY WONDER OR OLD HOMESTEAD.** 65 days. The most popular green-podded, climbing Bean; early and productive. Pods 8 to 9 inches long, very slender. Suitable for quick freezing.

**DUTCH CASE KNIFE.** (Snijboonen). 65 days. Pole Bean. Green snap pods, 7 to 8 inches long, straight, flat, brittle, of good quality; best as a shell Bean. Beans very flat, ivory-white.

**Prices: Lb., 50c, postpaid. Not postpaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.**

**TOP CROP.** 48 days. A new important addition to the Tendergreen class. Early and productive, stringless, resistant to common Bean Mosaic, medium green, pods 6 inches long by ¾ in. wide, round. Excellent for shipping, market as well as canning and freezing. **1 lb., 60c, postpaid. Not postpaid, 10 lbs., \$5.50; 25 lbs., \$12.50; 50 lbs., \$24.00.**



Burpee's Improved Bush Lima

## Lima Beans Pole Variety

**KING OF THE GARDEN LIMA.** 88 days. An improved strain, vigorous, midseason, productive. Pods 5 to 6 inches long, very flat and wide and uniformly four-seeded.

### Dwarf or Bush Varieties

**BURPEE'S IMPROVED BUSH LIMA.** 75 days. Both Beans and pods are larger than the old type. The pods measure 5 to 6 inches long by 1¼ inches wide and are of a luscious flavor. They are frequently borne in clusters of from 5 to 8 pods. Suitable for quick freezing.

★**FORDHOOK BUSH LIMA NO. 242.** U. S. D. A. 75 days. A most excellent variety and exceedingly popular with market gardeners. Pods are about 5 inches long, containing 4 to 5 large, oval-shaped, very thick, white Beans. Suitable for quick freezing.

★**HENDERSON BUSH LIMA.** Thorogreen Green Cotyledon. (Baby Lima.) 65 days. A vigorous, hardy, very early and small type of Bush Lima. Pods small, about 3 inches long, containing 3 to 4 small, flat, white Beans. Suitable for quick freezing.

**Prices: Lb., 50c, postpaid. Not postpaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.**

Due to present rates of postage, and pending increases, please bear in mind that anything that is quoted "Not Postpaid" means that the postage will be extra and in the case of 10 lbs. of Beans, the mailing weight would be at least 12 or 13 lbs. on which the rates in force at time of ordering would prevail. Additional money must be included with the order for the postage, however, if it is not enough to cover the postage due, we will weigh the seeds to cover the actual funds received. Any extra money that is sent and not needed will be refunded immediately when your order is filled.



## Beets

**CULTURAL DIRECTIONS.** One ounce to 50 feet of drill; 6 to 8 pounds per acre. Beets prefer a well-prepared friable soil planted from ½ inch to ¾ inch deep, according to the texture of soil. For an early crop sow in drills 1 foot apart. Sow as early as the ground can be worked in the spring. When plants are large enough to use as greens, thin to 3 inches apart in the row. Beets can be sown as late as July for main crop. Hen manure is recommended as a fertilizer in the rows; care being used that the seed does not come in immediate contact with the fertilizer.

★**EARLY WONDER.** 55 days. An early variety. It is Turnip-shaped and is always smooth. The flesh is a beautiful deep red color and is of excellent quality. Tops are small and erect. Exceptionally good for early bunching.

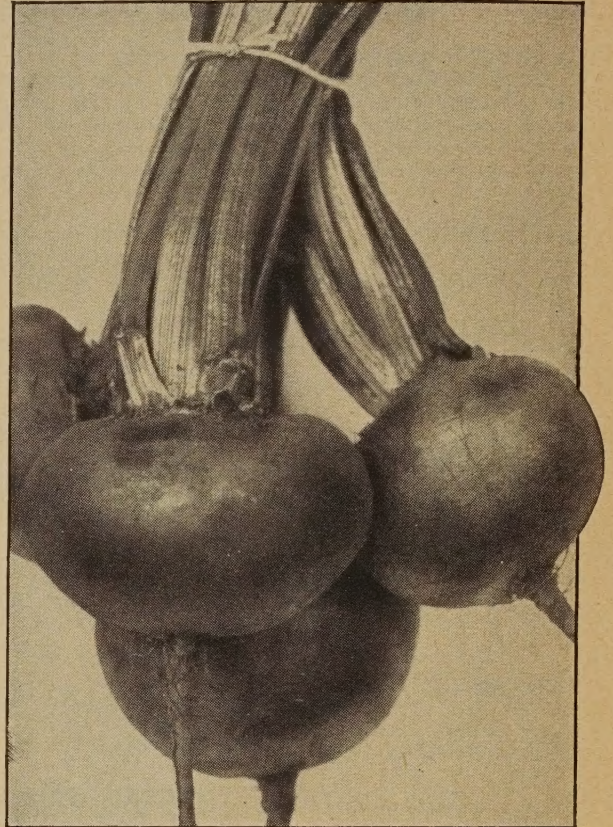
★**DETROIT DARK RED.** (Morse's Strain.) 55 days. The best for market gardens or home use. Roots smooth, medium size, globe-shaped; skin dark red; flesh solid vermilion-red. Tops small, upright, dark green, shaded red. **Pkt., 10c.**

**CROSBY'S EGYPTIAN.** 58 days. Where an early market sort is desired, our strain is unequalled. Roots a flattened globe shape, skin very dark, flesh a trifle lighter, tops small.

**EARLY BLOOD TURNIP, IMPROVED.** 60 days. Old standard table Beets. Roots nearly round or slightly flattened, bright red, zoned and of good quality. Not so early as Detroit, but with a larger, coarser top.

**GREEN TOP BUNCHING.** 60 days. Early, extremely attractive bunching Beet. Tops medium sized and erect. Foliage clean, grayish green that does not turn red or brown in the fall. Roots round, smooth and glossy, flesh bright blood-red. Mostly grown for Beet greens.

**Prices: Oz., 20c; ¼ lb., 50c; lb., \$1.50, postpaid.**



Detroit Dark Red (Morse's Strain)

## Sugar Beet

Sugar Beets and Mangels are of great value for stock feeding, because of the improved health and condition of the animals, increased flow and quality of milk, and because of the saving in fodder. The yield is enormous, and the cost of growing is trifling. Grow a patch of them for winter feed. They are also excellent for poultry.

**GIANT FEEDING SUGAR.** 120-150 days. A most valuable, large yielding variety for feeding; half sugar, oval-shaped, skin rose colored, flesh white, very nutritious and easily harvested.

**Oz., 15c; ¼ lb., 40c; lb., \$1.25.**



Italian  
Green  
Sprouting  
Broccoli

## Mangel or Stock Beets

**CULTURAL DIRECTIONS.** One ounce to fifty feet of drill, five pounds per acre. Sow early in the spring, in rows about two feet apart; cover seed one and one-half inches deep, pressing ground firmly over the seed. When plants are three inches high thin to about eight inches apart in the row. The plants pulled may be used for greens.

**MAMMOTH LONG RED.** 120-150 days. A favorite with the dairyman and farmer. Large, well-formed; dark red color, very nutritious; a big cropper.

**GOLDEN TANKARD.** (Yellow Eckendorf). 120-150 days. Very productive and sweet; tops and neck very small; flesh yellow; especially relished by cows and sheep.

**Oz., 15c; ¼ lb., 35c; lb., \$1.00, postpaid.**

"SWISS CHARD" is listed on page 9.

## Broccoli

A frequent application of nitrate of soda can be of great value to promote the life of this crop.

**ITALIAN GREEN SPROUTING.** 75 days. This variety produces a large head, like Cauliflower, consisting of a compact cluster of bluish green flowers. When the central head is removed, the plant produces many branches, each bearing small heads. These are cut with 3 or 4 inches of the branch attached and tied in bunches for market. The stems as well as the flower heads are cooked and served as Cauliflower. Suitable for quick freezing.

**Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.**



# Cabbage

**CULTURAL DIRECTIONS.** Three ounces of seed will plant an acre of early and five ounces an acre of late Cabbage. For early Cabbage sow in hotbeds in January or February. Transplant as early as possible to the open ground about two feet apart each way. For late Cabbage, sow in open ground in May and transplant about July first in rows 2½ feet each way.

In fertilizing, we recommend hen manure at the rate of one handful to three feet in the furrow. Care must be used so that the roots do not come in direct contact with the manure.

## Early Varieties

★**GOLDEN ACRE.** 64 days. Heads round, very hard. Matures two to three weeks earlier than Copenhagen Market, but is otherwise quite similar. Owing to earliness and remarkable uniformity, will prove the most profitable early Cabbage for market gardeners.

**Pkt., 10c; oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.**

**EARLY JERSEY WAKEFIELD.** 62 days. Market gardeners in general consider this the best early variety. Conical heads are uniform in shape, very solid. Our stock is dwarf, compact and extremely early.

**Pkt., 10c; oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid**

**IMPROVED COPENHAGEN MARKET.** 65 days. Nearly as early as Jersey Wakefield. Stems short, heads large, round and solid, few outer leaves.

**Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.**

**GREEN ACRE.** 66 days. A comparatively new strain with the general characteristics of Golden Acre, but holds its green color longer, an added value to market gardeners and shippers.

**Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.**



Golden Acre Cabbage

**FERRY'S ROUND DUTCH.** 71 days. Splendid for home and market garden. Plants small and compact; stem short. Heads almost ball-shaped; commonly 7 to 8 inches in diameter, 6 inches deep, and weigh 4½ to 5 lbs.; firm and of fair quality.

**Oz., 45c; ¼ lb., \$1.35; lb., \$4.00, postpaid.**

## Late Varieties

**FERRY'S HOLLANDER.** 100 days. Decidedly the best variety of late Cabbage. Heads become firm while still rather small. They reach good marketable size in 90 to 100 days, but continue to enlarge, maturing in about 120 days. Plants medium small, allowing closer planting, short stem, erect and compact. Extremely hardy, splendid quality and keeps perfectly in storage until late spring. Decidedly the best variety for muck growing.

**Oz., 60c; ¼ lb., \$1.70; lb., \$5.00, postpaid.**



Danish Ballhead

★**PENN STATE BALLHEAD.** 100 days. A heavy yielding strain of the short stem Danish Ballhead type. Originated by Pennsylvania State College. Yields as high as 26 tons per acre have been recorded.

**Oz., 40c; ¼ lb., \$1.25; lb., \$3.75, postpaid.**

**BONANZA.** 75 days. Almost round, very firm and uniform. The shortest core of any Cabbage we know, making it extremely slow to produce seeders. Can be harvested early as it makes a firm head, but can also be held until later. Ideal for shipping, as well as market.

**Oz., 95c; ¼ lb., \$3.60; lb., \$12.00, postpaid.**

**BUGNER.** (Yellows resistant.) 110 days. A large variety for kraut, market and storage. Has secondary or partial resistance to yellows. Heads large, round or slightly flattened.

**Oz., 50c; ¼ lb., \$1.50; lb., \$4.50, postpaid.**

★**DANISH BALLHEAD.** 95 days. Short-stemmed, heads round, very solid and heavy. Splendid keepers, hardy, and the best winter sort. Not recommended for muck growing.

**Oz., 40c; ¼ lb., \$1.25; lb., \$3.75, postpaid.**

**PREMIUM FLAT DUTCH.** 105 days. Highly valued for its fine quality. Heads very solid, broad, round, flattened on top, fine grained and tender.

**Oz., 30c; ¼ lb., 85c; lb., \$2.50, postpaid.**

**AMERICAN SAVOY.** (Chieftain). 85 days. Large, flattish heads, very curly and hard. One of the best Savoyes.

**Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.**

**MAMMOTH ROCK RED.** 90 days. Heads solid, of good size and quality.

**Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.**

**RED STONEHEAD.** 80 days. An exceptionally good variety forming round heads, smooth, hard, of a glowing red color. A good keeper.

**Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.**



## Cabbage

### Yellows-Disease Resistant Varieties

**JERSEY QUEEN.** 62 days. A selection from Jersey Wakefield which has a conical head, but is slightly darker green.

Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.

**RESISTANT DETROIT.** 68 days. An excellent yellows resistant strain of Golden Acre. Very popular in early markets.

Oz., 40c; ¼ lb., \$1.25; lb., \$3.75, postpaid.

**MEDIUM COPENHAGEN MARKET.** 73 days. Yellows resistant. To meet the demand for a later and larger headed type. Uniformly round, firm and an attractive slightly bluish green color.

Oz., 60c; ¼ lb., \$1.70; lb., \$5.00, postpaid.

**RESISTANT GOLDEN ACRE.** 63 days. Yellows resistant.

Oz., 75c; ¼ lb., \$2.35; lb., \$7.00, postpaid.

★**WISCONSIN HOLLANDER NO. 8.** (Yellows-resistant). 90-100 days. A heavy yielding late storage type, highly resistant to yellows. Round head, and yields greater tonnage than ordinary strains.

Oz., 45c; ¼ lb., \$1.35; lb., \$4.00, postpaid.

★**MARION MARKET.** 75 days. A yellows-resistant strain of Copenhagen Market. Round head and crisp tenderness of the parent Cabbage. Principally adapted on yellows infested soils, where non-resistant strains fail completely.

Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.

## Brussels Sprouts

The culture is the same as for Cabbage which it resembles, the edible part being the small heads, an inch or two in diameter that form at each leaf joint all the way up the stalk. The leaves should be broken off in the fall to give more room for the little heads to grow. Delicious and more tender than any Cabbage. 90 days. Suitable for quick freezing. Half-dwarf.

Oz., 60c; ¼ lb., \$1.70; lb., \$5.00, postpaid.

You have bought them on the market in the little quart boxes. Why not grow your own? It will be an effort worth while for you to have them in your own garden.

## Cauliflower

**CULTURAL DIRECTIONS.** One ounce of seed will produce 4000 plants. Five ounces of seed to an acre. Directions about the same as Cabbage, except planting in rows about 3 feet apart and 18 inches apart in the row. When plants begin to head, tie leaves up around the heads to protect from the sun.

**EARLY SELECT SNOWBALL.** 55 days. A very fine strain of early Cauliflower. Plants of medium height with rather waved or crumpled leaves with bend outward at the tips. Inner leaves cover the head well. Foliage is medium green. Heads of good depth, solid, ivory-white and of fine quality. Early and very even at time of maturity, therefore requires prompt handling. Adapted for summer and early fall harvest.

Oz., \$2.25; ¼ lb., \$6.75; lb., \$20.00, postpaid.

★**GROWERS SPECIAL IMPROVED.** 60 days. Well adapted for use under a wide range of conditions and generally considered the most satisfactory main crop strain for fall harvest. Plants are large and erect with ample foliage for head coverage. Leaves are long, rather straight, plain edged and medium bright green color. The heads are large, smooth, very deep, very solid and pure white. Unexcelled for quality. Is about a week slower in reaching maturity and the harvest is not so concentrated.

Oz., \$2.25; ¼ lb., \$6.75;  
lb., \$20.00, postpaid.

**HELIOS.** Original. Snow-white solid heads with uniform, tall, upstanding protecting foliage. Is unsurpassed for cutting during the last period of summer.

**SELANDIA.** Early type, has large, broad, robust foliage which affords good protection for the large, solid white heads. Suitable for quick freezing.

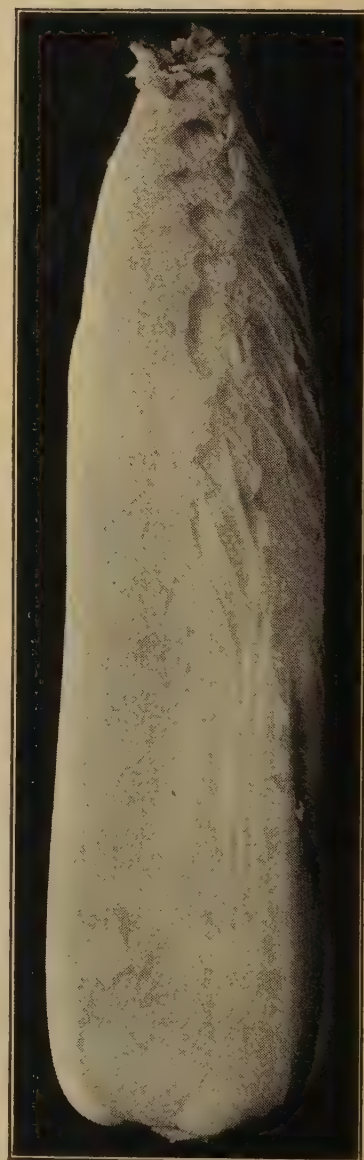
Oz., \$2.85; ¼ lb., \$8.50;  
lb., \$25.00, postpaid.



Brussels Sprouts



Early Select Snowball Cauliflower



Celery Cabbage



## Celery Cabbage

**CULTURAL DIRECTIONS.** One ounce will produce 2000 plants. Do not sow seed till the last of May, earlier sowing generally going to seed instead of making heads. Seed may be sown in seed beds and transplanted in rows three feet apart and about fifteen inches apart in the row, or may be sown in rows and thinned.

**MICHIHLI.** 70 days. A new strain of Celery Cabbage. In habit of plant it resembles Chihili, but the growth is more vigorous. The leaves are dark green and do not have the yellowish cast of Chihili. The leaf margins are waved and the individual plants are very uniform. It is surer heading, and in trial plantings made on a commercial scale it has produced 99% marketable heads.

Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.

**CHIHILI.** 70 days. Imported from Holland. This is the true strain. It has a delicate flavor, much milder than Cabbage. The heads are long, about 16 inches, rather slim, coming to a point at the top. Color is very dark bluish green, with the inner leaves and stalks blanched to a beautiful snow-white. This past season it proved its place and is highly recommended as a true strain.

Oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.

## Swiss Chard

**CULTURAL DIRECTIONS.** One ounce to fifty feet of drill; five pounds per acre. Sow early in the spring, in rows eighteen inches apart and thin to one foot apart. The plants are of very rank growth, and will continue to grow and produce all summer, and if given a little protection during the winter, will produce early greens in the spring.

**LUCULLUS.** 55 days. Leaves large and curly. Plant grows about 2 feet high, midribs are very broad and are a good substitute for Asparagus during the summer months.

Pkt., 10c; oz., 15c; ¼ lb., 45c; lb., \$1.35, postpaid.

**NEW RHUBARB.** A Chard of unique crimson color. Stalks sweet and succulent. Bright red in color; leaves green to bronze, heavily veined with red. Plants are vigorous and will yield a tremendous crop throughout the summer and fall, until frost.

Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.



Swiss Chard



Imperator Carrots

## Carrots

**CULTURAL DIRECTIONS.** Carrots require about the same simple care as Beets; they have no serious insect enemies, and they are rarely attacked by disease. It is best to plant them in soil that is friable and richly fertilized. Plant the seed one-half inch deep in loose, well-prepared soil, making rows 16 to 24 inches apart. Cultivate as soon as the plants are well established and thin to 2 or 4 inches in row, according to size of the variety. Plantings may be made from early spring until mid-June. For winter storage the later date is advisable.

★**NANTES CORELESS, STRONG TOP.** 68 days. A very superior Carrot. It is coreless, brittle, fine grained and of fine, mild, sweet flavor. The color is reddish orange and the skin is smooth. It is 6 inches long, cylindrical, and very stump-rooted. Suitable for quick freezing. Pkt., 10c.

**SUPREME HALF LONG.** 75 days. Resembles a small refined Danvers with short tops. Roots 6 to 7 inches long, about 2 inches in diameter at shoulder, tapering to a half stump. Exterior smooth and of excellent color. Interior flesh tender, sweet and of fine flavor. Core small and the same dark red as the rest of the flesh.

**IMPERATOR.** (Long type). 77 days. Selected strain, specially developed for bunching. Top medium height, abundant and strong for good bunching. Roots long, slender, smooth and uniformly tapered. Flesh rich orange color.

★**STREAMLINER.** 77 days. An ideal new bunching Carrot for shippers and market gardeners. Tops short, rather sparse, dark green and strong. Roots long, slender, nearly cylindrical, 8 to 10 inches long, and they grow completely underground.

Oz., 25c; ¼ lb., 70c; 1 lb., \$2.00, postpaid.



## Carrots (Cont.)

★**CHANTENAY, RED-CORED.** 70 days. This is a distinct improvement over the well known standard Chantenay, especially in color, texture and quality of flesh. Roots 5½ to 6 inches long, 2¼ inches thick at the shoulder; tapered stump root. Flesh and core reddish orange, fine grained and tender. A favorite with canners, market gardeners and shippers. Suitable for quick freezing.

**CHANTENAY, LONG TYPE.** 70 days. A strain of Chantenay bred especially for growing on soils where the moisture table is high. Tops are shorter than the regular Chantenay. Roots definitely longer but fully as large; stump rooted at maturity. Texture and color equal to Red-Cored Chantenay. Suitable for bunching or bushel use. Suitable for quick freezing.

**TOUCHON.** 68 days. A quality Carrot for home and market garden. Tops medium height and strong. Roots orange-scarlet, 6½-7½ inches long; 1¼-1½ inches thick; straight, cylindrical, strictly stump-rooted. Flesh deep orange with inconspicuous core. Similar to Nantes but preferred by some for greater length and stronger top. Suitable for quick freezing.

★**MORSE'S BUNCHING.** 77 days. Tops short; foliage rather coarsely cut and stems medium size and strong. Roots at maturity are 1¼ to 1½ by 8 inches in size, almost cylindrical with rounded shoulders, and are well stumped.

**LONG ORANGE.** 85 days. Good variety for deep sandy soil.

**SCARLET HORN.** 60 days. A small, early stump-rooted variety of good flavor and quite coreless. The roots will average about 3 inches long.

**OXHEART or GUERANDE.** 72 days. Very short, thick and stubby. Very desirable for heavy clay soil, as it is easily harvested.



Supreme Half Long Carrots

**WHITE BELGIAN.** 95 days. Large, white stock Carrot.

**YELLOW BELGIAN.** 95 days. Grows one-third out of the ground. Very large, long yellow stock Carrot.

### SPECIAL GROWERS RECOMMENDATIONS

Our cultural directions are the special recommendation of our growers who through actual experience know what is necessary for the successful growing of a crop, and give it to you for your guidance.

### PRICES:

Oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.

## Celery

### Yellows-Resistant Varieties Michigan Golden

Michigan State College Fusarium Yellows Resistant

Original Michigan State College seed is sold only in packets bearing this label and the seal of the College. No other seed is genuine. Beware of bulk seed of this variety.

We strongly recommend Michigan Golden for planting in soils where Fusarium Yellows or root rot attacks other varieties of yellow Celery. We specially recommend it for the summer and late crops. No one variety is adapted for use on all soils and for all climatic conditions. Michigan Golden is especially adapted for Michigan conditions but is widely and successfully grown in other sections of the country where root rot is also a destructive disease.

Michigan Golden was developed by plant pathologists of Michigan State College and the breeding work is continuing under their supervision. All genuine Michigan Golden seed is grown under their control, packeted at the college and sold only in the original seed containers.

Prices: 1 oz., \$1.75; 2 ozs., \$3.50; ¼ lb., \$5.50; lb., \$22.00, postpaid.

**MICHIGAN  
GOLDEN**



**YELLOWS-RESISTANT  
SELF-BLANCHING CELERY**

An improved strain of the original Michigan Golden variety bred by plant pathologists of Michigan State College for resistance to Fusarium yellows and introduced by Grand Rapids Growers' Inc.

**GENUINE MICHIGAN GOLDEN SEED IS SOLD ONLY IN  
PACKETS BEARING THE SEAL OF MICHIGAN  
STATE COLLEGE**

Michigan Golden is highly resistant to Fusarium yellows, also known as root rot, crown rot, stunt or sickness. It is not resistant to other celery diseases and seed treatment together with the use of protective dusts or sprays must be relied upon to control leaf blights.

In any inquiry concerning this seed inclose this label and address your communication to

**MICHIGAN STATE COLLEGE  
DEPARTMENT OF BOTANY AND PLANT PATHOLOGY  
EAST LANSING, MICHIGAN**

No warranty, expressed or implied, is given as to description, productiveness or purity of this seed and we can not be in any way responsible for the crop. If the purchaser does not accept these terms the seed should be returned immediately and money will be refunded.

G

Serial No.



Michigan Golden Celery

★This variety recommended by Michigan State College



## Celery

### Yellows Resistant Varieties

**CULTURAL DIRECTIONS.** One ounce will produce from 5,000 to 10,000 plants, two ounces per acre. Muck soil is best for Celery, but good Celery may be grown on rich, loamy soil if water can be applied freely. Celery needs manure and fertilizer, but as muck soils are usually well supplied with an abundance of nitrogenous matter, a fertilizer high in phosphate and potash usually gives the best results.

**MICHIGAN STATE GREENGOLD.** Fusarium Yellows resistant.

1/2 oz., \$1.25; oz., \$2.00; 1/4 lb., \$7.50;  
1/2 lb., \$15.00; lb., \$30.00, postpaid.

**CORNELL NO. 19.** 100 days. We offer the true strain of this excellent variety. It has been developed by Cornell University by crossing Golden Self Blanching and Pascal. 10 1/2-11 inches to joint with an over-all length of 24 to 25 inches. Hearts long and comparatively full. Stems thick, rounded and of smooth texture. Combines the good qualities of the Pascal type and is highly resistant to fusarium yellows.

Oz., \$1.35; 1/4 lb., \$4.75; lb., \$18.00, postpaid.

**NEW TALL GOLDEN.** 31-C. (Yellows Resistant.) About 24 inches tall, compact, with ribs of good length, approximately 10 inches to the first joint. The stems are rounded and of medium thickness.

Oz., \$1.40; 1/4 lb., \$4.50; lb., \$16.00, postpaid.

**NEW GOLDEN PLUME.** 8-C-3. (Yellows Resistant.) Plants are tall, normally 26 inches in height, full hearted and upright in habit of growth. Its thick meaty stems are approximately 8 inches to the first joint. May be used as a yellows resistant substitute for either Wonderful or Golden Plume No. 4162. Reported crop failure. Very little seed available.

Oz., \$1.40; 1/4 lb., \$4.50; lb., \$16.00, postpaid.

**CORNELL NO. 6.** 100 days. Similar in general characteristics to Cornell No. 19, but comparing, the plants are shorter in height, are stockier and of somewhat more open formation, petioles shorter, stems thicker and less ribbed. Has a good heart formation and is highly resistant to Fusarium yellows.

Oz., \$1.35; 1/4 lb., \$4.75; lb., \$18.00, postpaid.

**JERSEY GOLDEN PLUME.** Taller type. It is an excellent variety for early planting, showing some resistance to soil diseases. On account of the great care taken in selecting and roguing we know there is none better. The ribs are from 7 to 8 inches to the first joint, according to growing conditions and the height is about 26 to 28 inches.

Oz., \$1.75; 1/4 lb., \$6.50; lb., \$24.00, postpaid.

## STANDARD Yellow Varieties

**NEW GOLDEN SELF BLANCHING.** 85 days. This is the celebrated "Vilmorin" French strain and has been imported direct from France. It has a long stalk and is commonly called "TALL STRAIN."

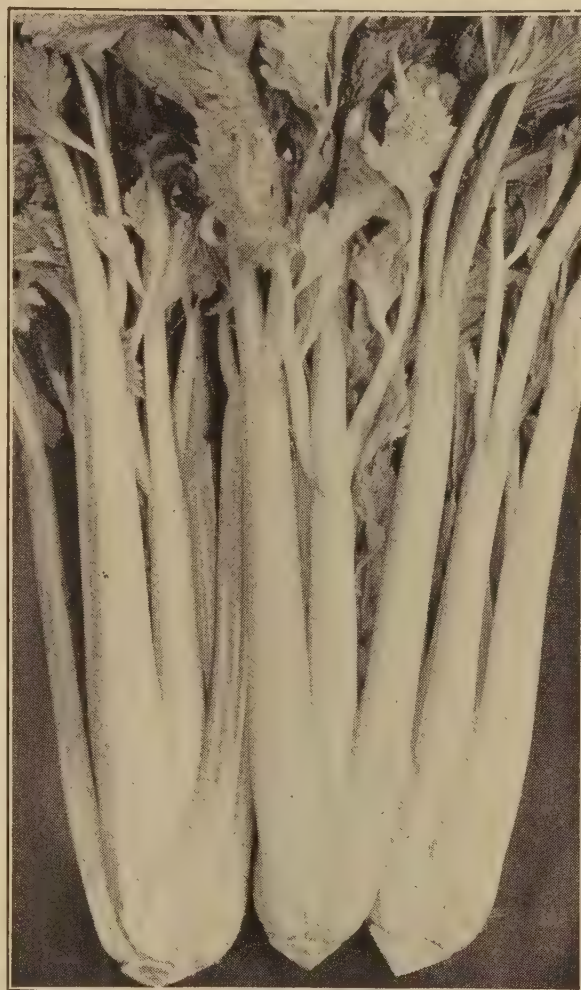
Oz., \$1.00; 1/4 lb., \$3.50; lb., \$12.00, postpaid.

**NEW GOLDEN SELF BLANCHING.** 85 days. American grown.

Oz., \$1.00; 1/4 lb., \$3.50; lb., \$12.00, postpaid.

**GOLDEN PLUME NO. 4162.** (New strain.) Our improved strain fills the need for a taller, long-stemmed Golden Plume. Retains earliness and ease of blanching of the original strain, but is more compact in form, straighter, and much better adapted to the standard crate. Normally 24 to 26 inches tall, with stems 7 1/2 to 8 1/2 inches and a full heart.

Oz., \$1.00; 1/4 lb., \$3.50; lb., \$12.00, postpaid.



Cornell No. 19

**GROWERS WONDERFUL.** 80 days. A valuable early variety similar to the Golden Plume. The plants are semi-dwarf, very vigorous and have a full heart which bleaches quickly to a golden yellow color. Excellent for market gardeners.

Oz., \$1.00; 1/4 lb., \$3.50; lb., \$12.00, postpaid.

**TALL NON-BOLTING GOLDEN PLUME.** This is a strain that grows taller and faster than the original types. Its ability to withstand low temperatures without bolting make it the most satisfactory of the Golden Plume strains for growing under certain unfavorable conditions. 8 1/2 to 9 inches to joint; 26 to 27 inches over-all height.

Oz., \$1.35; 1/4 lb., \$4.75; lb., \$18.00, postpaid.

## Farm Fertilizers

Commercial fertilizers are those which are used for general farm purposes, and are composed of the three elements of plant food, namely Nitrogen, available Phosphoric Acid and Potash K<sub>2</sub>O and are mixed by the world's largest fertilizer manufacturers in the proper proportions, so as to give your soil the proper available plant food to produce a maximum crop. We handle large quantities of the various analyses every year and will ask that you consult us and get the right fertilizer for your specific needs. Prices will be quoted upon application.

Mixed Fertilizers. Standard analyses.

Nitrate of Soda

Sulphate of Ammonia

Super Phosphate

Muriate of Potash

Steamed Bone Meal

Pulverized Sheep Manure

Shredded Cattle Manure

Lime

Manganese Sulphate

Aluminum Sulphate

Copper Sulphate

Ammonium Nitrate

Cyanamid

Zinc Sulphate

Magnesium

Iron Sulphate



## Choice Market Garden Varieties

### Green Varieties

★**GROWERS EARLIGREEN.** The finest, earliest green Celery we know. Vigorous and large; compact in habit of growth. Plant is surprisingly large for an early sort. The outer leaves are green and the very full heart is pure white, brittle and of most delicious flavor. In our trials this proved to be an outstanding variety in all details. It is the best green Celery on the market today, and should be in heavy demand this year.

Oz., \$1.75; ¼ lb., \$6.75; lb., \$24.00, postpaid.

**PARAGON.** A Celery of exceptional merit. The plant is dwarf, vigorous, quite hardy, and has a very full heart. Stalks broad, quite thick, very solid, crisp and tender, bleaching readily to a golden yellow color. Highly recommended for an early or late crop.

Oz., \$2.25; ¼ lb., \$7.50; lb., \$26.00, postpaid.

### Pascal and Utah Strains

**GROWERS PASCAL No. 49.** An entirely new strain of this increasingly popular type of Celery. Grown and developed by one of the most expert seed producers in the country. May be grown for early crop, if it is transplanted in the field after all danger of frost has passed. It is 22 to 26 inches tall, 8 to 10-joint, stalky, compact and straight in habit of growth. Stems broad-ribbed but smooth, indicating its fine, brittle texture and excellent nutty flavor. May be bleached to light greenish yellow or shipped from row as any green Pascal.

Oz., \$2.00; ¼ lb., \$7.00; lb., \$25.00, postpaid.

**IMPROVED CALIFORNIA PASCAL.** (New Strain.) 120 days. This is a green type summer Pascal Celery which bleaches readily. The heart stalks grow tall and full. The entire stalk is of excellent eating quality, being tender with a delicious nutty flavor. The thick rounded stalks are smooth, not ribbed and free from strings. Height 24 inches with 10 to 12 in. to the first joint. May be used for either early, medium or late crop.

Oz., \$2.25; ¼ lb., \$7.50; lb., \$26.00, postpaid.

**CALIFORNIA PASCAL.** Use Utah 15 as listed below, which takes its place.

**UTAH No. 15.** A strain of Utah (California Pascal) of mid-season maturity. Plants are large, height 26 to 28 inches. Leaves are dark green, deeply cut, moderately broad. Plants are erect, compact, full hearted. Edible stems are usually 8 to 10 inches long, are numerous, of medium width, thick, rounded and quite smooth, crisp and of fine quality.

Oz., \$1.50; ¼ lb., \$4.50;  
lb., \$16.00, postpaid.

Growers Earligreen

**SUPERIOR PASCAL.** Use No. 52-10 B as listed below.

**TALL UTAH, No. 52-10 B.** Plants are tall, 26 to 28 inches, leaves moderately large, medium dark green. Plants are erect and compact. Stems are 8 to 10½ inches long, noticeably of uniform length, rounded, thick, waxy in appearance. Blanching readily; tender, crisp and of excellent quality. Highly recommended by all growers who have had it in trials this past season.

Oz., \$1.50; ¼ lb., \$4.50; lb., \$16.00, postpaid.

**UTAH 52-70.** About 135 days. A slightly larger Utah than Tall Utah 10 B and darker leaved. Over-all height 28 to 29 inches. Ribs 9½ to 11 inches, rounded, thick, smooth and medium dark green. Makes large size, high hearts and is very compact and tightly shingled.

Oz., \$1.50; ¼ lb., \$5.50; lb., \$20.00, postpaid.

**EMERSON PASCAL.** (Fern-leaved, blight resistant). About 125 days. A distinct new type of green Celery, developed by and named after the late Mr. R. A. Emerson of Cornell University. This variety is resistant to fusarium yellows and to early blight. Over-all height 26 to 28 inches. Rib length 10 to 11 inches; ribs thick, round, smooth, medium light green and brittle. Shows rather low or open centers, but butts large and well shingled. Leaves light yellowish green and finer cut than other Celeries. Is not non-bolting.

Oz., \$1.50; ¼ lb., \$5.50; lb., \$20.00, postpaid.

**CELERIAC.** Large Smooth Prague. 110 days. Turnip rooted Celery. Pkt., 10c; oz., 90c; ¼ lb., \$2.70; lb., \$8.00, postpaid.



Growers Pascal No. 49



## Sweet Corn

CORN is not discounted, the regular list price being net, and are not postpaid except at the one lb. price. Money to cover postage must be included on mail orders or will be weighed to cover the actual funds received.

**CULTURAL DIRECTIONS.** One pint for 100 hills; about six quarts per acre. Early Corn is planted in rows 2½ to 3 feet apart, and about 8 inches apart in the row, in May, and will be ready for table eight or nine weeks from date of planting. Later varieties should be planted from the 15th of May to the 15th of June. Plant in hills 3 to 4 feet apart. It will be ready for use in from 10 to 12 weeks from date of planting.

### Open - Pollinated

★**GOLDEN "SUNSHINE."** 74 days. A valuable yellow variety for the market grower or the private gardener. It is a cross between the Golden Bantam and Gill's Early Market and combines the earliness and large size of ear of the Gill's Early Market with much of the high quality of the Golden Bantam. It is ready for market a week to 10 days earlier than Golden Bantam, and has a much larger ear, the ears average 8½ inches long, with 12 to 14 rows.

★**GOLDEN BANTAM.** 79 days. Hardy, early maturing, very dwarf. Cob is small but fills out nicely with large, deep cream-colored kernels, which turn yellow when ripe. No home gardens should be without this excellent Corn.

**IMPROVED GOLDEN BANTAM.** 85 days. Superior to the original Golden Bantam in quality, and has larger ear. It matures about the same time. Nearly all ears carry 12 rows of deep, rich, golden yellow kernels, set close upon the cob. It is a favorite with the market gardener.

**GOLDEN EVERGREEN.** 95 days. This new variety combines all the good qualities of Golden Bantam and Stowell's Evergreen. Has the bright golden color and tender kernels of Golden Bantam and the flavor and sweetness of Stowell's Evergreen. Ears much larger than Bantam, not quite as large as Evergreen, but much earlier. Stalks are full leaved and usually bear two well developed ears.

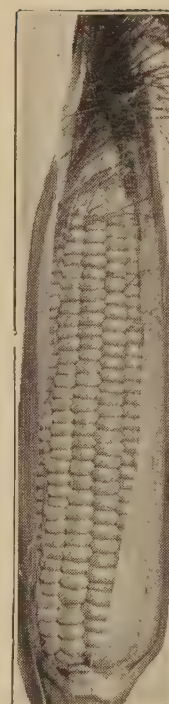
★**STOWELL'S EVERGREEN.** 90 days. Most popular late Sweet Corn. More extensively planted than any other sort, being the general favorite with market gardeners. Ears of good size, grain deep; tender and sugary.

**PRICES:** Lb., 40c, postpaid. Not postpaid, 10 lbs., \$3.50; 25 lbs., \$7.75; 50 lbs., \$15.00.

**COUNTRY GENTLEMAN.** (White or Shoe Peg Corn). 90 days. An especially fine quality Corn; without row formation.

**EARLY EVERGREEN.** 90 days. Has all the merits of the Stowell's Evergreen. This is a white Corn. It is a splendid variety for the market gardener.

**BLACK MEXICAN.** 83 days. Reputed to be the sweetest and most delicious of all table Corn. Color is white when young, changing to bluish black in later stages.



### Hybrids

A hybrid is the first generation of a cross between strains of different parentage and involving one or more inbred lines of Corn or their combinations.

**GOLD RUSH.** 67 days. This is the one. A first early yellow hybrid for the early market with the strong hybrid vigor and productiveness. Stalks 6 ft. tall. Ears 8½ inches, 12 to 14 rowed, slightly tapered, well filled to the tip. Most attractive yellow; tight husk. Tender, sweet and of fine quality and flavor.

**GOLDEN ROCKET.** 67 days. Plant 5 to 6 ft. tall, foliage sparse and dark green, few suckers. Ear is 7 to 7½ inches long x 1¾ inches in diameter, 10 to 12 rows, medium yellow, kernels fairly deep and medium wide, Unusually fine quality for such an early Corn.

**SPANCROSS C13.3.** 70 days. One of the best early hybrids. Highly resistant to bacterial wilt. Well tipped, small ears of 10 to 12 rows. Kernels golden yellow, sweet and tender.

**FOREMOST Y-1.** This variety has quickly become popular for fresh market, canning and freezing. Its large, uniform, high quality ears give it an unusually attractive appearance. As compared to Golden Cross Bantam it is earlier, superior in yield, fully equal in quality and has the ability to remain in top condition longer.

**CARMELCROSS.** (79 days.) A second early hybrid developed by the Connecticut Experiment Station, New Haven. Vigorous and heavy yielding in comparison to its earliness. Medium sized gently tapering ears with 12-14 rows of yellow kernels.

**PRICES:** Lb., 60c, postpaid. Not postpaid, 10 lbs., \$5.50; 25 lbs., \$13.00; 50 lbs., \$25.00.

**MARCROSS C13x6.** 72 days. This has proved a very good early market and home garden variety. Stalks are short but sturdy, highly resistant to Stewart's disease. Ears long, plump, abruptly tapered at the tips, 10 to 14-rowed with light cream-yellow, medium broad kernels of good quality.

**GOLDEN CROSS BANTAM.** 85 days. Excellent for market gardens and well adapted for canners' use. Highly resistant to Stewart's disease and very prolific. Stalks sturdy, with exceptionally broad, dark green leaves. Ears 10 to 14-rowed, slightly lighter yellow than Golden Bantam. Kernels medium in width and depth. Suitable for quick freezing.

**IOANA HYBRID.** (All-America Selection.) 87 days. A mid-season yellow hybrid, highly resistant to both drought and wilt. Plants tall and sturdy with broad, numerous leaves. Ears 7½ to 8 inches long, 12 to 14 rows, cylindrical, well filled with medium narrow light yellow kernels. An attractive and productive variety for either gardener or canner. Suitable for quick freezing.

### Pop Corn

**AUSTRALIAN HULLESS HYBRID.** Dwarf growing; heavy yielder of attractive ears; peculiar form, being nearly as thick as long. Color pearly white. Entirely hullless, making it the tenderest of any Pop Corn when popped.

**Lb., 65c, postpaid. Not postpaid, 5 lbs., \$3.00.**

**MINNHYBRID No. 250.** Developed by the Minnesota Experiment Station from Japanese Hullless over which it showed a marked improvement in yield equivalent to about

15% more per acre with 25 to 30% greater expansion of popping which gives increased tenderness; kernels are white.

**Lb., 65c, postpaid. Not postpaid, 5 lbs., \$3.00.**

**SOUTH AMERICAN YELLOW.** 110 days. Sunburst. Better adapted for Michigan climate. It matures about 2 weeks earlier than the true type South American yellow. Amber color, large size when popped, having a butter-colored tint.

**Lb., 40c, postpaid. Not postpaid, 5 lbs., \$1.75.**



## Table and Pickling Cucumbers



**CULTURAL DIRECTIONS.** One ounce of seed to 50 hills; 2 pounds per acre. Cucumbers should not be planted until the ground is warm, about June 1st. For pickles, they may be planted as late as July 1st. They require a warm, rich, sandy soil. Plant in hills about 4 feet apart and about 8 seeds to the hill. When all danger from insects is past, thin to 3 or 4 of the strongest plants.

Cucumber Beetle—No. 10 Pyroclide Dust is the control measure to keep your Cucumbers clean. Apply promptly and grow your Cucumbers without any trouble. Circular free on request.

**GROWERS EARLY DARK GREEN.** 70 days. Selected from Cubit variety. A comparatively new variety of special merit, because of its excellent shape and dark green color. Fruits white spined, cylindrical and hold their color to a larger size than most other varieties. Fruits 7½ to 8 inches long. 1⅞ inches in diameter. Shy seeder.

**ACE HI.** 65 days. White spine variety, 9 to 11 inches long, round at ends; dark green with trace of light green around blossom scar, small seed cavity, crisp flesh.

**STAYS GREEN. (Black Diamond).** 60 days. Splendid for shipping. A rich dark green, 8 to 9 inches long, slightly tapered, full at both ends.

**IMPROVED LONG GREEN.** 68 days. A standard late, well-known table sort. 12 to 14 inches long, slender, more or less warted, tapering towards the stem end, color dark green, flesh white and firm.

**WHITE SPINE. (Improved.)** 58 days. A very fine, early strain. Fruit very rich, dark green, symmetrical, thick and nearly square ended, vigorous and productive.

★**IMPROVED "A & C."** 68 days. The vigorous growing, disease-resistant vines produce an abundance of uniform, exceedingly dark green Cucumbers, averaging 10 inches long. The fruits are of uniform diameter from stem to blossom end, are rather slim, averaging 1¼ to 1½ inches in diameter, without any bulge in the center, and with practically no taper at the ends. Pkt., 10c.

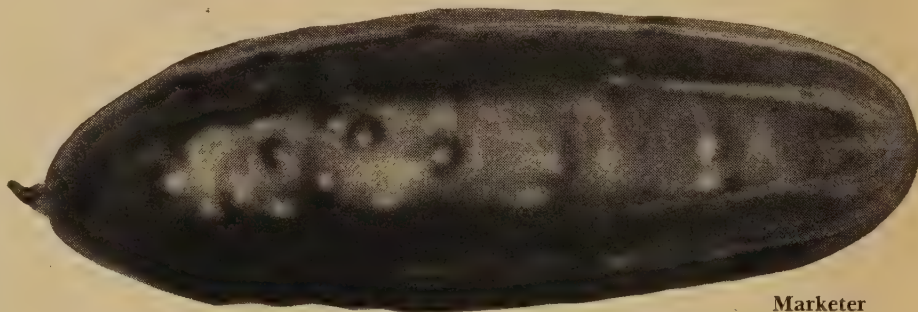
**CHICAGO PICKLING or WESTER-FIELD'S.** 58 days. Early, heavy yield. A very prolific variety combining all the qualities desired by those who raise Cucumbers. Fruits are of uniform size and good color. Used almost exclusively by all large pickling houses. Pkt., 10c.

**HYBRID CUCUMBER, FOREMOST SL-1.** This F1 hybrid is the darkest green Cucumber we have ever seen, it is a beautifully symmetrical slicer, 8 inches long, slender and cylindrical with blocky, rounded ends. The flesh is crisp, clear white with unusually small seed cavity. It is white spined, and the spines are very few and very fine. The skin is thick and quite tender necessitating careful handling and packing. It is earlier than Marketer and A & C, in fact it produced two good sized pickings by the time Marketer had made only one picking of slicing sized fruits. The seed is now available in trial packets only, containing about 50 seeds at \$1.00 per packet, postpaid.

**STRAIGHT-8.** 62 days. This outstanding variety produces symmetrical cylindrical fruits about 8 inches in length, and about 1½ inches in diameter. The fruits are well rounded at the ends. This is an ideal shipping variety.

**LONGFELLOW CUCUMBER.** 72 days. An excellent long, slender, dark green variety, equally desirable for greenhouse forcing or outdoor culture. 12 to 14 inches long by 2½ inches in diameter. Fairly early, a good healthy grower; very productive.

**DAVIS' PERFECT.** 58 days. Is one of the most prolific sorts. The fruit is long, slim and holds its color till nearly ripe.



Marketer



**MARKETER.** 70 days. A variety of recent introduction, producing very dark green cylindrical fruits which taper slightly at the ends. Fruits 7½ to 8 inches long, 2¼ inches in diameter. White spined. Vines vigorous and prolific. Its uniform shape and attractive color make it an excellent market variety.



Prices all Cucumbers: Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.

★This variety recommended by Michigan State College.



## Eggplant

**CULTURAL DIRECTIONS.** One ounce to 1000 plants. Seed germinates very slowly and requires warm ground. Start in hotbeds in March, transplant about June 1st, in rows about three feet apart and two feet apart in the row. Eggplant requires a rich soil, free from disease and rotation of crop is recommended.

**BLACK BEAUTY.** 80 days. Early and productive. Fruit large and of rich glossy black color.

**NEW YORK PURPLE.** 80 days. A favorite market variety. Fruits larger than the Black Beauty. The plant is large, spreading and spineless, producing 4 to 6 large, oval fruits of dark purple color.

Oz., \$1.00; ¼ lb., \$3.00; lb., \$10.00, postpaid.

## Kale or Borecole

**CULTURAL DIRECTIONS.** One ounce to 150 feet of drill. Sow from August 15th to October in rows 18 inches apart, and they will yield greens during fall and winter. They are improved by freezing.

**DWARF CURLED SCOTCH.** 110 days. A handsome, very finely curled, dwarf spreading variety, foliage long and attractive bright green; very hardy.

**TALL CURLED SCOTCH.** 110 days. Plants of this variety grow 2 to 3 feet in height, bearing long plumelike light green leaves, which are very much cut and deeply curled at the edges. Very hardy.

Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.



Black  
Beauty  
Eggplant

## Endive

**CULTURAL DIRECTIONS.** One ounce to 150 feet of drill. Sow in rows about 15 inches apart and thin to one foot apart in the row. Sow seed for fall crop in June or July. When nearly full grown, tie outer leaves together bringing them up over the head for blanching. A well balanced fertilizer is recommended.

**LONG GREEN CURLED or MOSS CURLED.** 95 days. The most hardy and vigorous sort, has very curly leaves, the mid-rib being white. After blanching, the leaves make a delicious and appetizing salad.

**BROAD-LEAVED BATAVIAN.** (Escarolle). 90 days. One of the best varieties for salads; leaves of upright growth, broad, more or less twisted and waved, bright deep green, with a nearly white mid-rib. Inner leaves form a fair head which blanches a creamy white.

Oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.

## Collards

**TRUE GEORGIA.** 75 days. Plant 2 to 3 ft. high forming a cluster of tender, undulated leaves at the top of its rather long stem; used as greens.

Oz., 20c; ¼ lb., 60c; lb., \$1.75, postpaid.



Broad-Leaved Batavian Endive

## Cress or Pepper Grass

**CULTURAL DIRECTIONS.** Sow early in the spring in rich, well prepared soil, in rows about fifteen inches apart. Thin to four inches apart in the row.

**EXTRA CURLED.** (Pepper Grass). A small, curled plant having a fine pungent flavor and used as a salad. Should be sown thickly and frequently, covering very lightly as it soon runs to seed. May be cut several times.

Oz., 20c; ¼ lb., 50c; lb., \$1.50, postpaid.

**TRUE WATER.** A hardy perennial water plant; the sprightly favored leaves of which are prized for salads as well as for garnishing. Must be grown on moist banks or in water covered soil.

Oz., 90c; ¼ lb., \$2.75; lb., \$8.00, postpaid.

## Kohl - Rabi

### TURNIP-ROOTED CABBAGE

**CULTURAL DIRECTIONS.** One ounce to 200 feet of drill. Seed should be sown in light, rich soil, very early in the spring for early crop, in rows eighteen inches apart and thin to six inches apart in the row. Plantings should be made the latter part of July for fall use. Should be used when young and tender.

**EARLY WHITE VIENNA.** 60 days. Very early, small tops, can be planted close together; best for forcing, or field culture.

Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.

## Leek

**AMERICAN FLAG.** 150 days. Stem about 10 inches long by 2 inches thick. A strong, vigorous plant with mild flavor. One of the best sorts for the market garden.

**ELEPHANT.** (Monstrous Carentan). 150 days. Large stems 6 to 8 inches long, 2 to 3 inches thick. Leaves very dark green, hardy, prolific, for fall and early winter use.

Oz., 60c; ¼ lb., \$1.70; lb., \$5.00, postpaid.



White Vienna Kohl-rabi



## Leaf Lettuce

**CULTURAL DIRECTIONS.** One ounce to 150 feet of drill. Lettuce requires rich soil to grow best quality. Mix pulverized hen manure with the soil and sow seed very early in the spring. For Leaf Lettuce, sow in rows twelve inches apart and do not thin until plants are big enough to use.

Head Lettuce should be sown in rows twelve inches apart and thinned to eight inches apart in the row.

During warm weather germination may be greatly aided by firming the seed bed, and sow the seed shallow. Keep the soil moist until germination is completed.



The above photograph shows the Grand Rapids Forcing Lettuce, Washington Strain, in full bloom in the greenhouse, where it is possible, by careful plant selection, to keep it up to its original purity.

**GRAND RAPIDS FORCING LETTUCE, WASHINGTON STRAIN.** 45 days. This splendid strain is one of the favorite strains being used by all of the larger growers, who recommend it as a superior Lettuce. The late Mr. Yonker, who was one of our leading greenhouse growers, by careful plant selection, has kept it up to its original purity. It is absolutely true to type. Color is light green, heads very leafy, leaf crisp, tender and curly, quality of the best. We

grow our own foundation seed in the greenhouse, as shown by the above photograph and send it to one of the best seed growers on the coast to grow the seed crop.

**Pkt., 10c; oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.**

**GRAND RAPIDS TIP-BURN RESISTANT.** 45 days. Color light green, somewhat like the Washington strain, being used for greenhouse growing where tip-burn is visible.

**Oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.**

**SLOBOLT.** A new variety of the Grand Rapids type that is slow to bolt, developed by the United States Dept. of Agriculture and has a definite characteristic for withstanding high growing temperatures. Large, erect, compact; leaves broad, wavy, heavily fringed on the edges, tender, of light green color.

**Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.**

**EARLY CURLED SIMPSON.** 40 days. An early loose leaf variety. One of the best sorts for the home garden.

**Oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.**

★**BLACK-SEEDED SIMPSON.** 40 days. One of the best loose leaf varieties for home garden or for the market garden, for outdoor sowing. Can be grown all through the season; very tender.

**Pkt., 10c; oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.**

**PRIZEHEAD.** 45 days. A crisp and tender loose-leaved, non-heading sort, color light brown on a medium green base, quality good.

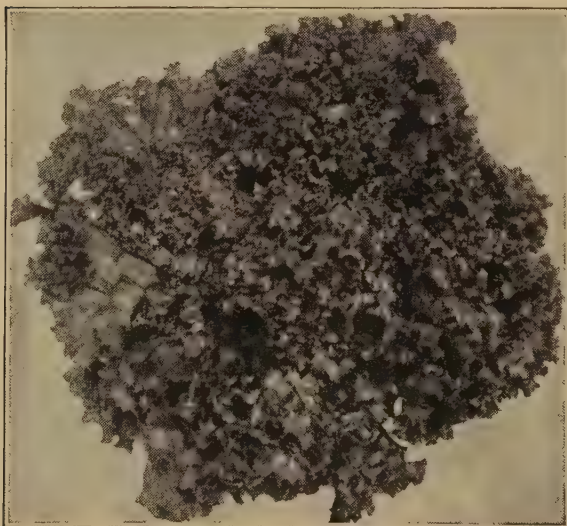
**Oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.**

**CHICKEN.** Tall, leafy, prolific. Dark green

**Oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.**

**OAK-LEAVED.** 43 days. A distinct Lettuce. Leaves are smooth but are deeply lobed to resemble the leaf of an oak tree. Medium large size, spreading, fairly dark green. Leaves are thick, succulent and tender.

**Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.**



Black-Seeded Simpson



## Head Lettuce

**BIG BOSTON.** 76 days. Heads best in cool weather of early spring and late fall. We do not recommend it for the hot weather months.

**Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.**

**WHITE BOSTON.** 76 days. Has a fine, large solid head and light green outer leaves, but does not have the brown edges. A tightly folded heart that bleaches to a bright, creamy yellow shade. It is sweet and crisp.

**Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.**

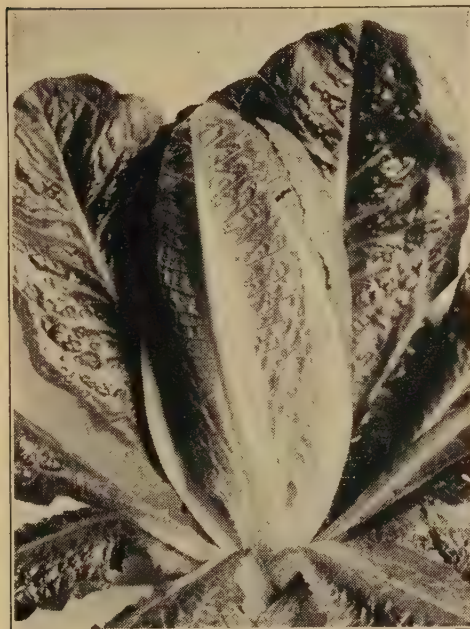
**GREAT LAKES.** 83 days. A heading variety of the Imperial type, developed by the U. S. Dept. of Agriculture and the Michigan State College. Leaves large and well folded; heavy ribs. Shows considerable resistance to tip-burn and ability to head under adverse conditions.

**PREMIER GREAT LAKES.** 75 days. Developed from a single plant selection of Great Lakes at Penn. State College. All-America Bronze Medal, 1947. Heads solid, practically round, up to 7 inches in diameter and two pounds in weight. Slow to bolt and very resistant to tip-burn.

**GREAT LAKES No. 428.** 75-80 days. An early strain. It is gray-green in color. The wrapper leaves lay back from the head exposing a large, well rounded head with a smooth base and small ribs. It is very uniform in maturity, and during 1949 made a name for itself in marketing quality.

**PENNLAKE.** 83 days. Developed at the Pennsylvania Experiment Station, from a cross of Great Lakes and Imperial 847. Heads compact and well covered, protected from scald by broad wrapper leaves. Less ribby than Great Lakes, but equally solid and resistant to tip-burn.

**Oz., 65c; ¼ lb., \$2.00; lb., \$6.00, postpaid.**



Cos Lettuce

Read Roy E. Biles'  
"GARDEN MAGIC"

320 pages, 17 full color illustrations, hundreds of line drawings; practical, durable binding and gilt stamped; size 8x10¾ inches.

**\$3.95, Postpaid**

ALSO the MODERN FAMILY GARDEN BOOK, 160 pages, fully illustrated; size 7x10½ inches.

**\$2.00, Postpaid**

Plus 3% Michigan Sales Tax.

**IMPERIAL or CORNELL 456.** 82 days. A true selection of the Imperial type. This strain shows greater resistance to tip-burn than does the Imperial No. 44. Particularly adapted for muck soils. Frame and head slightly smaller than Great Lakes, but makes a firm and harder head. It is a lighter green in color, and also resistant to early bolting.

**Oz., 60c; ¼ lb., \$1.70; lb., \$5.00, postpaid.**



New York or Wonderful Lettuce

**IMPERIAL 44.** 82 days. This is somewhat similar to Imperial 152, being a hybrid from this popular variety. It has very long well-folded leaves and produces hard well-formed heads under ideal circumstances.

★**IMPERIAL No. 152.** 82 days. New heading variety that is outstanding over other varieties. Resistant to brown blight, and well adapted for early fall planting. The heads are medium sized, hard and attractive.

**IMPERIAL No. 847.** 83 days. Resistant to brown blight.

**Oz., 60c; ¼ lb., \$1.70; lb., \$5.00, postpaid.**

**NEW YORK No. 515 IMPROVED.** 81 days. Medium size, compact plant, but produces heads of good size. Head leaves quite upright at early variety; leaves broad, of thick texture, fairly blistered and crumpled, and a rather bright green.

**NEW YORK or WONDERFUL.** 75 days. A large, late globular heading variety; leaves broad, of thick texture, fairly blistered and crumpled, and the borders frilled; color dark green, quality good. Known in California and the West as "Los Angeles" and shipped to eastern markets under the misleading name of "Iceberg." For an all-season variety stands unrivaled.

**Oz., 45c; ¼ lb., \$1.35; lb., \$4.00, postpaid.**

**ROMAINE or EARLY WHITE SELF-FOLDING LETTUCE.** 66 days. We consider this the very best strain of the Cos variety. Very uniform in type, and forms a compact, firm head. Color dark green outside and beautifully blanch inside. Very crisp; sweet.

**DARK GREEN COS.** 70 days. A medium large dark green variety which forms a good sized, well folded head.

**BIBB LETTUCE.**

**Oz., 25c; ¼ lb., 75c; lb., \$2.50, postpaid.**



## Muskmelons

**CULTURAL DIRECTIONS.** One ounce will plant 50 hills, two pounds an acre. Melons do best in a rich, sandy soil. Hills should be from four to six feet apart. Plant ten to twelve seeds to the hill. Cover seeds with an inch of soil. When danger from frost and insects is past, thin to four good plants to the hill.

**CRAIG'S HONEY.** 90 days. 7½ inches long by 6½ inches diameter; skin pearly green: distinct ribbing. Very coarse netting; flesh very thick, firm with exceptionally deep salmon color, of delicious quality, sweet and spicy. Excellent for home garden. Unequaled for roadside market trade.

★**HEARTS OF GOLD.** 88 days. A splendid small, midseason variety. Fruit round, 6 inches long and 5½ inches in diameter, weighing 3 to 3½ lbs., with a tendency to heart shape, lightly ribbed and covered with a fine gray netting; flesh very thick, deep salmon color, and of high quality; a good shipping Melon.

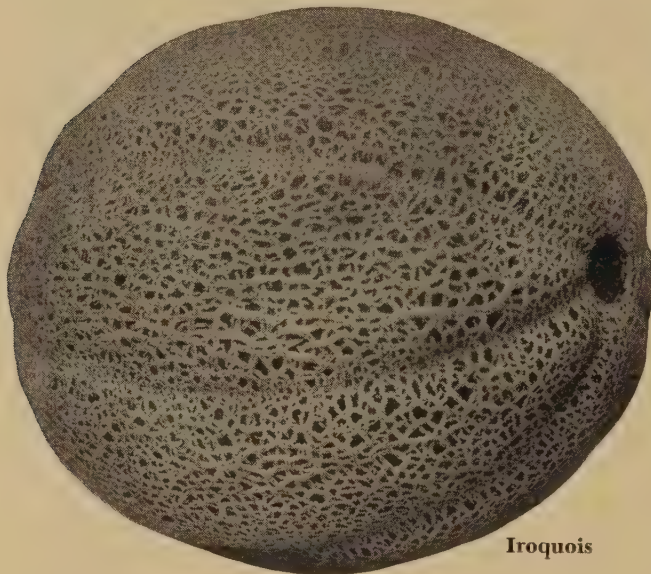
Pkt., 10c.

★**HONEY ROCK.** 80 days. One of the most prolific varieties grown. The fruit is round, slightly flattened at the ends, 5 to 6 inches in diameter, weighing 3 to 4 lbs., and distinctly netted. The flesh is soft pink with a greenish tint. The rind is hard and the flesh so firm that it is an excellent shipper.

Pkt., 10c.



Honey Rock Muskmelon



Iroquois

**HALE'S BEST No. 936.** 82 days. Is fairly early; a good shipper, oval in shape, averaging 5 in. in diameter and 7 to 9 in. long, with heavy netting, and fairly prominent ribs. The flesh is a rich deep salmon color with a very fine flavor.

**GOLDEN DELIGHT.** All-America Bronze Medal for 1952. It is an outstanding Melon for home and local market use, but not recommended for long distance shipping. Golden Delight is a large, broad, oval Melon of the Pride of Wisconsin type, but compared with this variety is larger and earlier. It has a very thick salmon colored flesh with one of the best flavors of any Melon in its class. It has an attractive grayish green netting on the skin with almost indistinct ribbing. It shows outstanding ability to produce high quality Melons under adverse weather conditions, and it is believed that this will become one of the most popular Melons for home garden and local market use.

Prices of Golden Delight:

Oz., 65c; ¼ lb., \$1.85;  
1 lb., \$5.50, postpaid.



Golden Delight

**BENDER'S SURPRISE.** 90 days. Delicious, salmon fleshed Melon, medium to large; oval, distinctly ribbed and covered with slight patches of netting; skin light yellow when ripe.

**IROQUOIS.** 90 days. This new Melon has definite resistance to Fusarium wilt. Fruits are round to oval, about 6½ inches in diameter, with prominent ribs and good netting; the rind is tough and holds up well. Flesh is deep orange color, of fine texture and excellent quality.

**SCHOON'S HARD SHELL.** 90 days. Thick, oval, prominent ribbing with abundant coarse netting; skin gray-green becoming yellow at maturity; flesh very thick, deep salmon-orange, well flavored, excellent quality. 6½ to 7½ inches in diameter, weighing 5 to 7 lbs.

**EXTRA EARLY OSAGE.** 84 days. Standard variety of splendid quality for nearby markets and home gardens. Fruits 6 to 7 inches long; almost round; with shallow furrows and sparse shallow netting. Flesh very thick; salmon-orange; fine-grained, sweet and aromatic.

**OSAGE or MILLER'S CREAM.** 92 days. Splendid Melon for home or market garden. Fruits 7 inches long and 6½ inches in diameter. Almost round; dark green skin that shows trace of yellowing at ripening stage, slightly netted and ribbed, flesh very thick, juicy, sweet, spicy, deep salmon-orange.

**PRIDE OF WISCONSIN.** (Market King.) 85 days. Similar in size and shape to Honey Rock. Oval in shape with tough, heavily netted rind. 6 inches long and 5½ inches in diameter, weighing 3½ to 4½ lbs. Flesh deep orange and very thick, sweet and of excellent quality.

Prices: Oz., 25c; ¼ lb., 85c; lb., \$2.50, postpaid.



# Selected Varieties of Watermelon

**CULTURAL DIRECTIONS.** One ounce to 30 hills, about four pounds per acre. Watermelons want rich, sandy soil. Cultural directions the same as for Muskmelons, except the hills should be eight feet apart.

**HARRIS EARLIEST.** (Cole's Early). 75 days. The best extremely early variety; fruits medium size, broad, oval; weighing 10 to 12 lbs., dark green stripes alternate with lighter; rind brittle, flesh bright red of good quality, seeds blackish.

**TOM WATSON.** 92 days. Produces Melons 18 to 24 inches long by 10 to 12 inches in diameter, weighing 35 to 40 lbs. Flesh deep red and very crisp; melting and of exquisite flavor. Good shipper.

★**KLECKLEY'S SWEET or MONTE CRISTO.** 85 days. One of the sweetest Melons on the market; medium early, long, averaging 18 to 20 inches, slightly tapering to the stem end, weighing 30 to 40 lbs. Rind very dark green, flesh very bright red and ripens nearly to the rind. Too tender for a shipping Melon, but excellent for market and home garden. **Pkt., 10c.**

**PEERLESS or ICE CREAM.** 85 days. An old standby. Medium early; fruit oblong, weighing 18 to 20 lbs.; rind light green, mottled and veined; flesh scarlet, solid to center, sweet, melting and delicious. Not a good shipper.

**SWEETHEART.** 85 days. A medium early variety growing to a large size; a heavy, round to oblong form with rather thick, tough rind and a good shipper, weighing 20 to 25 lbs. Color very light green, flesh bright red, with black seeds.

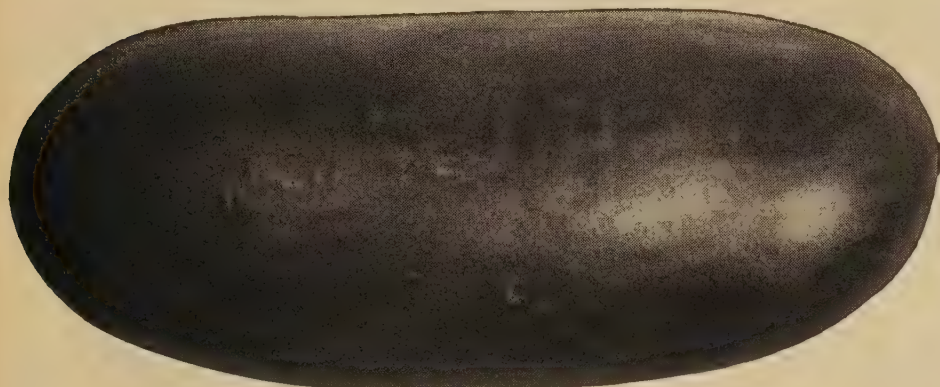
**Oz., 25c; 1/4 lb., 70c; lb., \$2.00, postpaid.**

**CITRON, RED SEEDED.** 90 days. The old well known red-seeded preserving Melon.

**Oz., 25c; 1/4 lb., 85c; lb., \$2.50, postpaid.**



Dixie Queen Watermelon



Kleckley's Sweet or Monte Cristo

**STONE MOUNTAIN.** This variety combines extra large size with earliness. It is nearly round in shape, pleasingly green in color and unexcelled for sweetness and juiciness. Fruits weigh from 35 to 40 pounds in the South, and the 95 days required for maturity make it easily possible to grow correspondingly large fruits in the North.

**Oz., 25c; 1/4 lb., 70c; lb., \$2.00, postpaid.**

**No. 10 PYROCIDE DUST** is the control measure against beetles and other insects. Apply promptly and grow your Melons without any trouble. Circular free on request.

## Mustard

**SOUTHERN GIANT CURLED.** 30 days. Plant vigorous and hardy, upright spreading growth, leaves large, green tinged yellow, much crumpled and frilled at the edges.

**LARGE SMOOTH-LEAF.** 50 days. Large, vigorous leaves, broad and oval, deep green, margin toothed but otherwise plain.

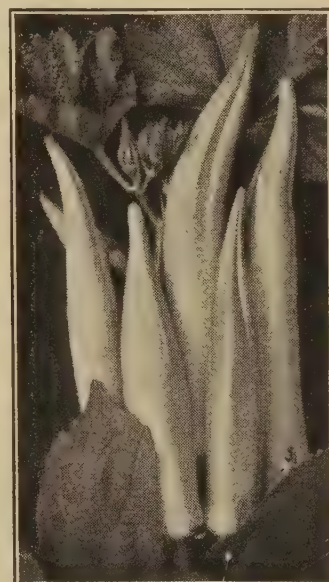
**Oz., 15c; 1/4 lb., 45c; lb., \$1.35, postpaid.**

## Okra or Gumbo

**WHITE VELVET.** 60 days. Plants 3 1/2 feet high, pods white, long, smooth and tender; early and productive.

**PERKINS MAMMOTH LONG POD.** 56 days. For home and market garden. Plants 4 to 5 feet tall, pods dark green, fleshy, tender, becoming 7 to 8 inches long. Distinctly ribbed and tapered.

**Oz., 15c; 1/4 lb., 30c; lb., \$1.00, postpaid.**



Okra



# Choice Onion Seed



Downing's  
Yellow Globe

## Sweet Spanish

**MICHIGAN STATE SWEET SPANISH.** This is an improved strain of Sweet Spanish, developed by Dr. Harmer of the Michigan State College. It has been selected and developed for a long keeping storage Onion. Very productive, good color, and fine for shipping.

**UTAH SWEET SPANISH.** 110 days. Desirable because of its deep yellow color, excellent keeping qualities, thicker skin and uniformity in size. Bulbs are globe shape at about 2½ to 3 inches, when larger they assume a slightly flattened globe shape. Flesh white and of mild, pleasing flavor.

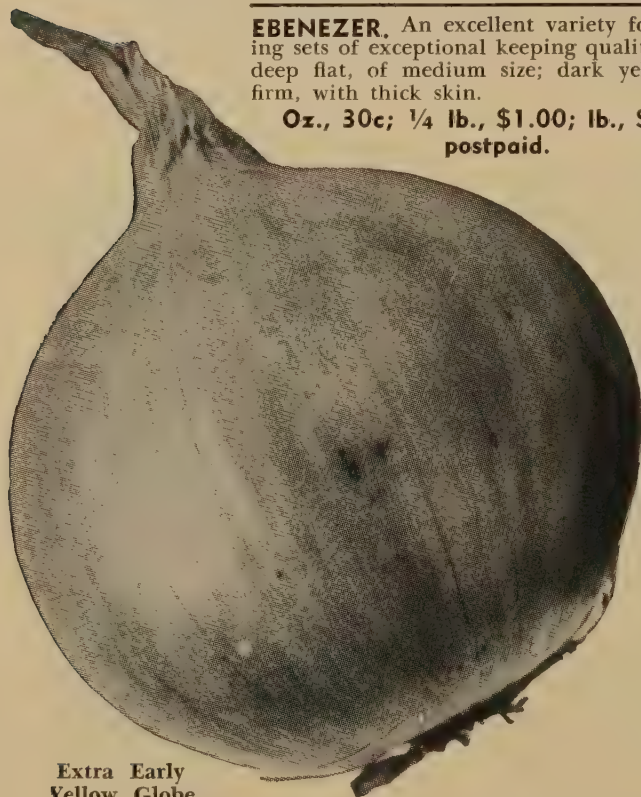
**SWEET SPANISH, GROWER'S STRAIN.** 110 days. The largest yielder of the yellow Onions, averaging 3 to 4 inches in diameter. The best and not susceptible to the attack of thrip. Good keeper and shipper.

**WHITE SWEET SPANISH.** 110 days. Similar to the original Sweet Spanish, except that it is white with glistening skin. Globe-shaped.

Oz., 60c; ¼ lb., \$1.80; lb., \$5.50, postpaid.

**EBENEZER.** An excellent variety for producing sets of exceptional keeping qualities. Bulbs deep flat, of medium size; dark yellow, very firm, with thick skin.

Oz., 30c; ¼ lb., \$1.00; lb., \$3.00, postpaid.



Extra Early  
Yellow Globe

**CULTURAL DIRECTIONS.** One ounce to 100 feet of drill; about four pounds to the acre. Onions for the market are generally grown on muck land in Michigan, but may be grown for home use on any rich, loamy soil. They appreciate plenty of fertilizer on muck; the market growers apply heavily about a 2-8-16 fertilizer. Drill in rows about a foot apart.

**DOWNING'S YELLOW GLOBE.** A new strain of Yellow Globe type, and superseding all the others. Compared with Brigham Yellow Globe, it has a uniformly darker color and is considered an improvement over the well known storage types. Bulbs globe-shaped, are very solid with tight fitting skins; excellent keeping qualities. 110 days to maturity.

Oz., 40c; ¼ lb., \$1.15; lb., \$3.25, postpaid.

**BRIGHAM STRAIN.** (The long keeping Onion). 109 days. One of the leading varieties of yellow globe Onions. Bulbs are selected for type and quality and produce Onions that are larger with a vigorous growth. They are good keepers, globe shaped with a rich golden color.

Oz., 40c; ¼ lb., \$1.15; lb., \$3.25, postpaid.

★**EXTRA EARLY YELLOW GLOBE.** 98 days. Excellent semi-globe shaped and is a good yielder. It ripens well, and under normal conditions the bulbs are ready for market 10 days ahead of the Southport Yellow Globe. The color is a rich deep yellow and it can be kept in storage for a limited time.

Oz., 40c; ¼ lb., \$1.20; lb., \$3.50, postpaid.



Sweet  
Spanish  
Grower's  
Strain

## Hybrid Onions

Scientific plant breeding makes it possible for us to offer Onion types with hybrid vigor, leading to heavy yields, uniformity and high quality. The following are available from the 1951 crop.

**Y-40.** A mid-early, mild, sweet type, nearly full globe (slightly elongated at the base). Appearance something like the Early Yellow Globe, but earlier in maturity by ten days.

**Y-41.** This hybrid produces bulbs of almost globular shape, slightly tapered to the bottom, with thin but tight, straw-colored skin, and mild, white flesh. A first early type, being of the same maturity as Early Yellow Globe, but with better skins and up to 50% higher yields.

**Y-42.** A hybrid of Yellow Sweet Spanish type, but about 10 days earlier than this well-known old variety. The bulbs are globular with good tight necks, deep straw colored skins, and mild, white flesh. Produces a heavy yield of large, uniform and attractive onions.

Oz., \$1.00; ¼ lb., \$3.50; lb., \$12.50, postpaid.  
10 lbs. or more, \$12.00 per lb.



Onion Seeds—Continued

**PRIZETAKER or MAMMOTH YELLOW SPANISH.** 105 days. Very large, and nearly round, light straw color, very mild and sweet. Late.

Oz., 65c; ¼ lb., \$2.00; lb., \$6.00, postpaid.

**YELLOW GLOBE DANVERS.** 105 days. A popular dependable variety. Is an exceptional keeper.

Oz., 45c; ¼ lb., \$1.35; lb., \$4.00, postpaid.

★**SOUTHPORT WHITE GLOBE.** 120 days. Same type as Southport Yellow Globe, with a thin delicate skin of pure paper whiteness, but two weeks earlier and exceedingly mild. It usually commands the highest price on the market.

Oz., 65c; ¼ lb., \$2.00; lb., \$6.00, postpaid.

**WHITE PORTUGAL or SILVERSKIN.** 100 days. An early flat white Onion of mild flavor. Used mostly to grow sets.

Oz., 60c; ¼ lb., \$1.70; lb., \$5.00, postpaid.

**WHITE BARLETTA.** 65 days. One of the earliest, handsomest and smallest of white pickling Onions. Makes a good bunching sort.

Oz., 45c; ¼ lb., \$1.35; lb., \$4.00, postpaid.

**WHITE WELCH.** 100 days. While it forms no bulbs it is one of the best for bunching as green Onions. Very hardy. The white shoots make a rapid growth and are ready for market ahead of those from sets. Mild and delicate in flavor.

Oz., 45c; ¼ lb., \$1.35; lb., \$4.00, postpaid.

**LONG BUNCHING (Heshiko.)** (American grown). A new perennial bunching Onion that does not form a bulb.

Oz., 60c; ¼ lb., \$1.70; lb., \$5.00, postpaid.

## Onion Sets and Plants

We can supply the Silverskin, Yellow Ebenezer, Yellow Globe or the English Multiplier sets, as well as Texas Bermuda Onion plants, and will solicit your inquiries.



Onion Sets

## Parsnips

**CULTURAL DIRECTIONS.** One ounce will sow 100 feet of drill; three to four pounds per acre. Sow in April or May. Parsnips require a long season to mature. Sow thickly, thin as for Carrots. Seed does not germinate well unless conditions are just right.

**HARRIS MODEL or ALL AMERICAN.** A most refined Parsnip. Exceptionally smooth and free from side roots, with a very attractive whitish color. Roots about 12 inches long with a well proportioned shoulder uniformly tapered to tip. Very tender and of fine flavor.

**HOLLOW CROWN.** 130 days. Thick shoulder. This variety is more generally grown than any other sort; roots smooth, tender and sugary. Pkt., 10c.

**LONG SMOOTH DUTCH or SUGAR.** 130 days. Roots very long, slim, much sweeter than the Hollow Crown.

**SHORT THICK.** 100 days. A fine bunch vegetable, tops one-half size of Hollow Crown. Short, thick roots, free from strings, flavor much more delicate than other varieties of Parsnips. Fully a month earlier than Hollow Crown and reach maturity in 100 days.

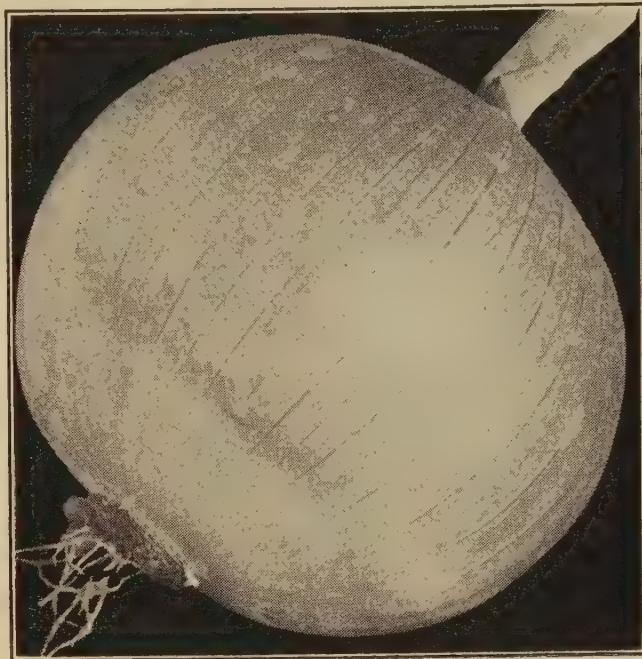
Oz., 15c; ¼ lb., 40c; lb., \$1.25, postpaid.

## Strawberry Plants

Dunlap, Premier or Everbearing. We will have good, sturdy plants in season, and solicit your inquiries.



Hollow Crown Parsnip



Southport White Globe

## Chives

A hardy perennial of the Onion type. Listed under "Herbs" on page 26.

Pkt., 10c; oz., \$1.00; ¼ lb., \$3.00; lb., \$10.00, postpaid.

## Parsley

**CULTURAL DIRECTIONS.** One ounce to 150 feet of drill. Seed germinates very slowly. Sow thickly in rows about 15 inches apart, and thin to four or five inches apart in the row. Parsley requires a rich soil.

**TRIPLE CURLED or MOSS CURLED.** (Paramount.) 85 days. Plant handsome, beautifully curled and rapid grower. Will produce a large crop.

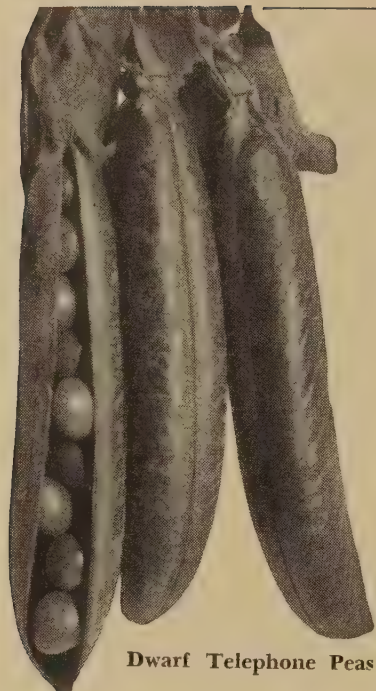
**HAMBURG ROOTED.** 90 days. Grown for the root which resembles a Parsnip in shape and color. Foliage very much like plain Parsley.

Oz., 15c; ¼ lb., 40c; lb., \$1.25, postpaid.



"Paramount" Moss-Curled Parsley





Dwarf Telephone Peas

## Garden Peas

PEAS are not discounted, the regular list price being "net", and are not postpaid except at the 1 lb. price. Money to cover postage must be included on mail orders or will be weighed to cover the actual funds received.

**CULTURAL DIRECTIONS.** One quart will plant 100 feet of drill; about 56 pounds per acre. Peas do best on rich, sandy loam that has been well manured the previous season. Plant smooth, early sorts as soon as the ground can be worked in the spring. The wrinkled varieties are liable to rot if the soil is cold and wet, and should be planted later.

**ALASKA.** 57 days. A small, smooth blue Pea, and one of the earliest. Grown largely by canners and market gardeners for early crop. Vines about two feet in height, pods small, but well filled. Can nearly all be harvested at one picking.

Lb., 35c, postpaid. Not postpaid, 5 lbs., \$1.65; 15 lbs., (1 pk.) \$3.75; 60 lbs. (1 bu.) \$13.75. Alaska only.

**LITTLE MARVEL or DARK PODDED SUTTON'S EXCELSIOR.** 60 days. One of the most prolific of the second early sorts. Pods long, 3 to 4 inches, filled with deliciously sweet Peas. Vines about 15 inches tall.

**LITTLE GEM.** 58 days. A second early, hardy variety. Prolific, bearing pods on both sides of the stalk, beginning near the ground. Pods medium length, round, and well filled to the end. Height of vine about 15 inches. Seed green, wrinkled.

**AMERICAN WONDER.** 60 days. One of the earliest and sweetest wrinkled Peas. Vines very dwarf and productive. Pods small, but well filled. The most delicious Pea for the home garden.

★**IMPROVED LAXTONIAN.** 62 days. The best of the Laxtonian type. Second early. A little earlier than the Gradus. Vine 16 inches high, sturdy, dark green and productive; pods dark green, four inches, broad, containing eight large Peas of excellent quality. The best second early, big-podded sort. Suitable for quick freezing.

★**WORLD'S RECORD.** 58 days. A new variety on the order of Gradus, being slightly earlier, more productive and true to a fixed type. Grows about 2 feet in height, with large, dark green pods nearly 4 inches in length, broad, pointed and always well filled with large, sweet Peas of splendid quality. An excellent, profitable sort for home or market garden. Suitable for quick freezing.

★**THOMAS LAXTON.** 62 days. One of the best second early sorts for the market gardeners. Vines of same height as the Gradus, but a little earlier, more hardy and productive. Pods long, blunt-ended and well filled with large Peas. Peas wrinkled. Suitable for quick freezing.

★**DWARF TELEPHONE.** A splendid main crop Pea, coming between the Telephone and Stratagem. Of the Stratagem type, but a heavier yielder. Height 2½ feet. Foliage very heavy, sturdy and dark green. Pods 4¼ inches long, dark green, broad, straight and pointed, containing nine large, medium dark green Peas of the best quality. Suitable for quick freezing.

★**ALDERMAN or TELEPHONE.** 72 days. A little later than Telephone. Vines about 4 ft. in height; very heavy foliage. One of the most productive sorts. Pods long, dark green, well filled; seed wrinkled. Suitable for quick freezing.

**LAXTON'S PROGRESS.** 60 days. Splendid variety for home, market garden and shipping. Vines dwarf, about 22 inches, dark green, prolific. Pods 4¼ inches long, handsome; dark green; plump, tapered at ends. Seeds large, wrinkled, cream, interior yellow. Suitable for quick freezing.

**CALIFORNIA BLACKKEY.** 95 days. A newer improved selection. Has concentrated pod set at crown. Holds pods erect, has large seed and is resistant to charcoal rot, cowpea wilt and nematodes. Normally much more productive than the old type Black Eye. Popular for edible purposes.

1 lb., 40c, postpaid. Not postpaid, 10 lbs., \$3.50; 25 lbs., \$7.75.

### Edible Pod Sugar Peas

The pods of the varieties listed below are cooked with the Peas. They have a high sugar content and make a delicious dish, and once tried, they will be regularly grown.

**DWARF WHITE SUGAR.** (Wilt resistant.) 64-67 days. Vines 24 to 30 in. tall. Slender, medium green, branching, productive, white blossomed. The pods are 2½-3 in. x 5/8-¾ in., straight to slightly curved, fairly plump, semi-pointed, light green, borne singly or doubly, tender, excellent quality.

**DWARF GRAY SUGAR.** 62 days. A dwarf, edible pod variety. Vines about 2 feet high. Cook pods like string Beans.

**MELTING SUGAR, or EDIBLE POD.** 70 days. A tall variety, bearing large, flat, brittle pods. These are sweet and are cut or broken and cooked like string Beans. It is a delicious vegetable and should be better known and more generally used.



World's Record Peas

Lb., 35c, postpaid. Not postpaid, 5 lbs., \$1.65; 14 lbs. (1 pk.) \$3.50; 56 lbs. (1 bu.) \$16.75.

Due to present rates of postage and pending changes, please bear in mind that anything that is quoted "Not Postpaid" means the postage will be extra and in the case of 10 lbs. of Peas, the mailing weight would be at least 12 or 13 lbs. on which the rates in force at time of ordering would prevail. Additional money must be included with the order for the postage, however, if it is not enough to cover the postage due, we will weigh the seeds to cover the actual funds received. Any extra money that is sent, and not needed, will be refunded immediately when your order is filled.



# Peppers



California  
Wonder  
Pepper

**LONG RED CAYENNE.** 70 days. Pendent fruits about 5 inches long and  $\frac{3}{4}$  inch in diameter at the base, often curved and twisted; bright red, hot and pungent.

**Oz., 90c;  $\frac{1}{4}$  lb., \$2.70; 1 lb., \$8.00, postpaid.**

**HUNGARIAN YELLOW WAX.** (Hot.) 60 days. Very early. Desirable for home, market garden and canning. Plants small, heavily productive. Fruits 6 to 7 inches long, 2 inches thick, tapered, smooth, waxy light yellow becoming bright red. Flesh thick, pungent.

**Oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$9.00, postpaid.**

**HUNGARIAN YELLOW SWEET.** 60 days. Considered the first early Pepper in the season. Plant is 12 to 15 inches in height, very hardy, and prolific, bearing fruit both upright and pendent. The fruit is from  $5\frac{1}{2}$  to 6 inches long by  $1\frac{1}{2}$  inches in diameter, tapered, smooth flesh; is fairly thick and pungent. Color is waxy yellow, becoming a bright red at maturity.

**Oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$9.00, postpaid.**

**SWEET BANANA.** 65 days. The plant is 20 to 24 inches tall, upright, dark green, very vigorous, heavy foliage of large leaves. Fruit  $6\frac{1}{2}$  to  $7\frac{1}{2}$  inches long,  $1\frac{1}{2}$  inches in diameter, tapered to the point with very slight curve; sweet, medium flesh wall, light yellow turning to bright red at maturity. Is an excellent variety for home and garden.

**Oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$9.00, postpaid.**

**BULL NOSE or LARGE BELL.** 55 days. Large, bell-shaped, thick fleshed fruit. Good for Mango pickles.

**Oz., 90c;  $\frac{1}{4}$  lb., \$2.70; 1 lb., \$8.00, postpaid.**

**WORLD BEATER.** 70 days. The most prolific large Pepper. Fruit very large, about 5 inches long. Flesh thick, mild and sweet. Pepper tapering and of a bright ruby color when ripe and very attractive.

**Oz., 90c;  $\frac{1}{4}$  lb., \$2.70; 1 lb., \$8.00, postpaid.**

**RUBY KING.** 65 days. One of the most profitable and satisfactory varieties for the home or market garden; plants are early, productive and of dwarf compact, upright growth; fruits pendent, often 4 to 6 inches long by 3 to 4 inches thick, tapering and of a bright ruby-red color; flesh is thick, mild and sweet.

**Oz., 90c;  $\frac{1}{4}$  lb., \$2.70; 1 lb., \$8.00, postpaid.**

**PIMENTO.** 73 days. A rather late, very thick-fleshed, heart-shaped, smooth, mild, crimson variety; much used for salads.

**Oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$9.00, postpaid.**

**RED CHILI.** 85 days. Small, red, cone-shaped. Very hot and prolific. Used for seasoning.

**Oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$9.00, postpaid.**

**CULTURAL DIRECTIONS.** One ounce will produce about 2000 plants; about 7000 plants for an acre. Sow seeds in hotbeds from February to April; transplant to open ground when all danger from frost is past, in rows about 3 feet apart and 18 inches apart in the row. Seed can be sown in the open ground late in May, and thinned as above. Cover seed about half an inch.

**CALIFORNIA WONDER.** 72 days. Thickness of flesh alone, which is often  $\frac{3}{8}$  of an inch, places this sweet Pepper above all others. Vigorous growing plants, blocky fruit 5 inches long and 4 inches wide. When fully matured, it has a waxed appearance.

**Oz., 90c;  $\frac{1}{4}$  lb., \$2.70; 1 lb., \$8.00, postpaid.**

**OAKVIEW WONDER.** 63 days. An earlier and more productive strain of California Wonder. Fruits blocky, smooth, with thick, mild, sweet flesh. Plants shorter and stockier but fruits are set earlier and more abundantly. An outstanding strain unsurpassed for shipping and for the home and market garden.

**Oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$9.00, postpaid.**

**CHINESE GIANT.** 80 days. Mammoth fruits 12 to 15 inches in circumference. Flesh thick, tender, mild and sweet.

**Oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$9.00, postpaid.**

**HARRIS' EARLY GIANT.** 63 days. The earliest and most prolific of all large Peppers. Is of dwarf, compact growth, bearing as many as 12 pendent fruits on a single plant. Fruit scarlet, measuring 5 inches long by  $3\frac{1}{2}$  inches in diameter; 3-lobed, mild and sweet. A profitable Pepper for the market.

**Oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$9.00, postpaid.**

**SUNNYBROOK.** 73 days. Sweet. Fruits Tomato-shaped, 2 inches deep, 3 inches in diameter, smooth, glossy dark green turning to deep scarlet-red. Flesh thick and sweet. It is early and productive. Truly a home garden variety.

**Oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$9.00, postpaid.**

**KING OF THE NORTH.** 64 days. A late introduction and a winner. Similar in type to Ruby King but decidedly earlier. The plant is of medium size and prolific. The fruit is long, moderately slender, tapering to 3 or 4 points.

**Oz., 90c;  $\frac{1}{4}$  lb., \$2.70; 1 lb., \$8.00, postpaid.**



Oakview  
Wonder



# Pumpkins



Connecticut Field Pumpkin

**CULTURAL DIRECTIONS.** One oz., of seed for 20 hills. About 3 pounds per acre. Usually grown in cornfields, but can be grown as a separate crop. Seed should be planted in hills 8 to 10 feet apart each way, after soil gets warm. Cultivate until vines begin to run. Cut Pumpkins after leaves die, leaving 3 to 4 inches of stem attached to fruit. Store in a dry place, and do not bruise.

**CONNECTICUT FIELD.** 70 days. Generally used for planting in Corn for stock feeding; also makes good pies.

**KING OF THE MAMMOTHS.** 120 days. The giant among Pumpkins. Often grows two feet or more in diameter.

★**SUGAR PIE.** 108 days. Fruit small, round, flattened at the ends, and slightly ribbed. Skin and flesh deep orange-yellow. Flesh very thick and of high quality.

**WINTER LUXURY.** 100 days. Round, medium in size, with a golden yellow skin closely netted like a netted Muskmelon; sweet and finely flavored and an exceptionally good keeper.

Prices: 1 oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.

# Radishes

## CANADIAN CUSTOMERS

We will accept your order only on remittance payable in United States funds or its equal. Notice announcement 16.

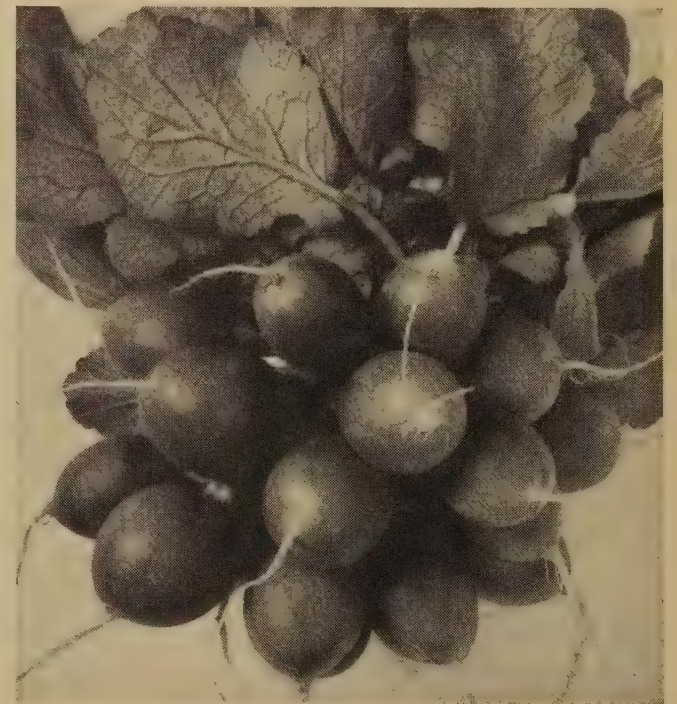
**CAVALIER.** 25 days. A highly colored and attractive variety for all purposes and especially for shipping. Tops small, roots oblong-globe, very firm and of bright red color. Especially adapted for growing on muck soils.

★**GRAND RAPIDS FORCING.** 20 days. New, improved. The best greenhouse variety and the earliest of the Scarlet Globe type, but superior in every way for greenhouse forcing. When properly grown it is the most handsome and best forcing sort with the shortest top and the Radishes are ready to pull before you realize it on this account. A scarlet globe variety with a short top.

The Grand Rapids Forcing Varieties are nationally known. Turn to the others: Lettuce is described on page 16; Tomatoes on page 29.

Radishes prefer a deep, rich, sandy soil and an application of a well balanced fertilizer.

Due to present rates of postage and pending changes, please bear in mind that anything that is quoted "Not Postpaid" means the postage will be extra and in the case of 10 lbs. of Radish, the mailing weight would be at least 12 or 13 lbs. on which the rates in force at time of ordering would prevail. Additional money must be included with the order for the postage, however, if it is not enough to cover the postage due, we will weigh the seeds to cover the funds received. Any extra money that is sent, and not needed, will be refunded immediately when your order is filled.



Grand Rapids Forcing Radish

Prices: Oz., 15c; ¼ lb., 30c; 1 lb., \$1.00, postpaid. Not postpaid, 10 lbs. or more, lb., 85c.

★This variety recommended by Michigan State College



## RADISHES—Continued

**COMET.** 25 days. Brightest colored of the bunching Radishes. Globe shaped, suitable for use when  $\frac{3}{8}$  to  $\frac{3}{4}$  inches in diameter, but become much larger without becoming pithy. Tops are slightly larger than Scarlet Globe. Roots attractive, bright clear red.

★**ICICLE.** (Short Top.) 25 days. One of the earliest long varieties, white throughout. Very crisp and tender.

**FRENCH BREAKFAST.** 20 days. Of oblong shape, small, quick growing, color rose-scarlet, with small white tip.



Early Scarlet Globe Radishes

**COOPER'S SPARKLER.**

20 days. White tip, quite similar to Scarlet Turnip White Tip as to size and time of maturity, only the Sparkler is more round or ball-shaped, and the white extends farther up the Radish, making a more attractive bulb.

**SCARLET TURNIP WHITE TIPPED.**

25 days. Round, deep scarlet, shading to a white tip at the bottom. Very early.

**CRIMSON GIANT.**

28 days. Larger than any other extra early variety but does not become pithy. Crimson-carmine. Turnip-shaped, flesh firm, crisp and tender.



White Icicle

## The Best Winter Radishes

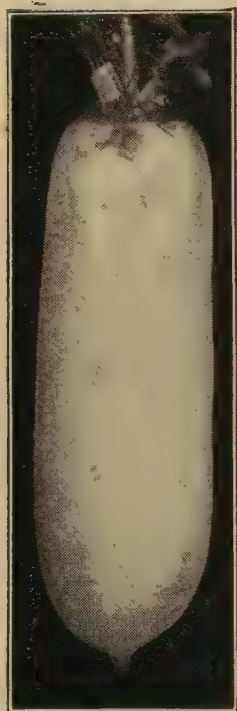
**WHITE WINTER.** (Celestial.) 60 days. Roots 6 to 8 inches long, thick, cylindrical and smooth, with a beautiful white skin and flesh, the whitest and least pungent of the winter Radishes.

**CHINESE ROSE WINTER.** 52 days. Roots 4 or 5 inches long, blunt at both ends, about 2 inches thick. Skin smooth and bright, deep rose color. Flesh white and crisp. One of the best winter sorts.

**LONG BLACK SPANISH.** 56 days. One of the latest and hardiest varieties for winter use; roots 8 to 9 inches long, 2 to 3 inches in diameter, and nearly black in color.

**ROUND BLACK SPANISH.** 56 days. Round, 3 to 4 inches in diameter. Skin almost black; flesh white, crisp and pungent.

**Prices all Radishes: Oz., 15c;  $\frac{1}{4}$  lb., 30c; 1 lb., \$1.00, postpaid. Not postpaid, 10 lbs. or more, 85c per lb.**

Celestial  
White Winter

French Breakfast Radishes

Due to present rates of postage and pending changes, please bear in mind that anything that is quoted "Not Postpaid" means the postage will be extra and in the case of 10 lbs. of Radish, the mailing weight would be at least 12 or 13 lbs. on which the rates in force at time of ordering would prevail. Additional money must be included with the order for the postage, however, if it is not enough to cover the postage due, we will weigh the seeds to cover the actual funds received. Any extra money that is sent, and not needed, will be refunded immediately when your order is filled.

All prices quoted herein are subject to change without notice



## Rutabagas

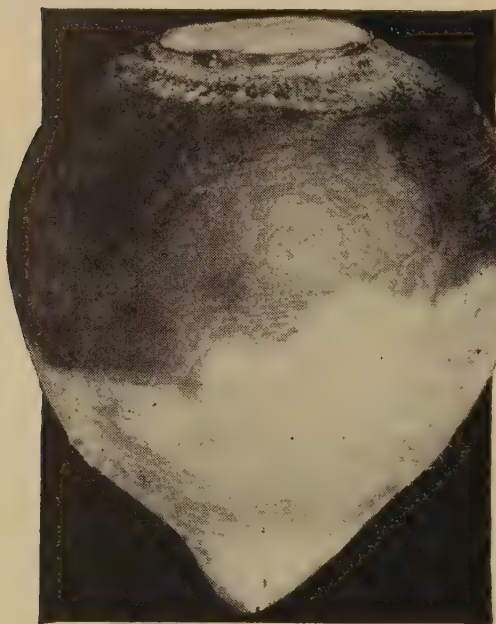
Mature in 100 days.

**AMERICAN PURPLE TOP.** A hardy, productive variety with small neck; roots large, globe-shaped, with small tap roots, bright yellow in color with purple top, solid, tender and sweet. Our strain is the best available.

Pkt., 10c; oz., 15c; ¼ lb., 35c; 1 lb., \$1.00, postpaid.

**CANADIAN GEM.** (Laurentian Neckless). A strain of Purple Top Swede, much preferred in Canada. Tops short, practically neckless. Roots large, spherical, purplish red above ground, light yellow below. Flesh creamy yellow, firm, mild and sweet.

Oz., 15c; ¼ lb., 45c; 1 lb., \$1.25, postpaid.



American Purple Top Rutabaga

## Salsify or Vegetable Oyster

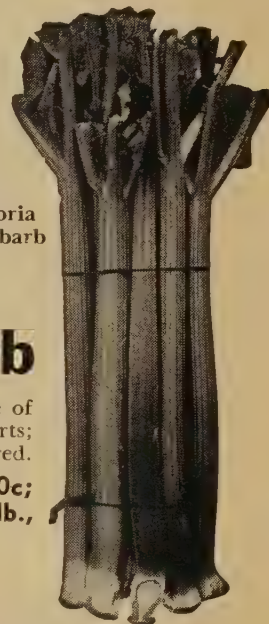
**CULTURAL DIRECTIONS.** One ounce to 75 feet of drill; 5 or 6 pounds to the acre. Sow the seed early in the spring in drills twelve inches apart and one inch deep. Thin to four or five inches apart. Like Parsnips, they may be left in the ground all winter and dug as soon as the ground is thawed. Salsify prefers a deep, rich sandy soil.

**MAMMOTH SANDWICH ISLAND.** 150 days. A splendid variety producing large, thick, tapering roots. Very uniform, mild and delicious in flavor. A popular sort with the market gardeners.

Oz., 45c; ¼ lb., \$1.35; 1 lb., \$4.00, postpaid.



Salsify



Victoria Rhubarb

## Rhubarb

**VICTORIA.** One of the best market sorts; stalks a beautiful red.

Pkt., 10c; oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.00, postpaid.

## Aromatic, Medicinal and Pot Herbs

For early use, sow seed in hotbed or in open ground in May, in rows one foot apart. Cover very lightly and thin to six inches apart in the row. They should be cut on a dry day, just before they come into full blossom. Tie in bunches and keep where they will dry quickly.



Sage

**ANISE.** Used for garnishing, seasoning and for cordials.

**BASIL, SWEET.** Annual. About 12 inches tall. Entire plant has fragrant, somewhat spicy aroma; used for seasoning.

**CARAWAY.** Seeds are used for flavoring breads and pastry, meats, etc.

**CELERIAC or TURNIP-ROOTED CELERY.** Giant Prague.

**CHICORY (French Endive).** Used extensively for salads. The new leaf growth forms a compact blanched head with broad, crisp leaves, having a pleasantly sharp flavor.

All the above: Pkt., 10c, postpaid.

**CHIVES.** Hardy perennial plants of the onion type. Easily grown from seeds. The small leaves are used for seasoning.

Pkt., 10c; oz., \$1.00; ¼ lb., \$3.00; 1 lb., \$10.00, postpaid.

**CORIANDER.** The seeds are used for flavoring.

Pkt., 10c, postpaid.

**DANDELION.** Improved thick leaf. Very superior strain. Makes vigorous, very compact growth. Leaves 18 to 24 inches across, thick in texture and blanch readily.

Pkt., 10c, postpaid.

**DILL.** Leaves are used in pickles and for flavoring soups and sauces.

Pkt., 10c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

**LAVENDER.** True. Perennial. Flowers are dried and placed in the linen closet to impart their perfume to the linens. Also used as a repellent to moths.

Pkt., 10c, postpaid.

**FLORENCE FENNEL.** Grown in home and market garden. 2 to 3 ft. tall. Chiefly grown for the bulblike structure formed by the enveloping thickened bases of the stalks of the lower leaves. Aromatic and of delicate flavor.

Pkt., 10c, postpaid.

**SAGE.** Most extensively used of any herb. An indispensable perennial. Very aromatic.

Pkt., 25c; oz., \$1.00, postpaid.

**SAFFRON.** Used for coloring certain dishes, also flavoring.

Pkt., 10c, postpaid.

**SUMMER SAVORY.** The leaves and young shoots are used for flavoring.

Pkt., 10c, postpaid.

**THYME.** Hardy perennial, 8 to 10 inches tall, of strong, agreeable, aromatic odor and flavor; used in medicine and for seasoning.

Pkt., 10c; oz., \$2.00, postpaid.

All prices quoted herein are subject to change without notice.



# Spinach

## Improved Varieties

IMPORTED TO MEET THE DEMANDS OF THE MOST CRITICAL TRADE

**CULTURAL DIRECTIONS.** One ounce to 100 feet of drill; eight to ten pounds per acre. Sow early for spring crop; in August for fall use; and if sown from the middle to last of September, and protected during the winter with a light covering of straw, it will be ready for use very early in the spring.

A fertilizer high in nitrogen and phosphate is recommended, especially for sandy soils.

During warm weather, germination may be greatly aided by firming the seed bed, and sowing the seed shallow. Keep the soil moist until germination is completed.

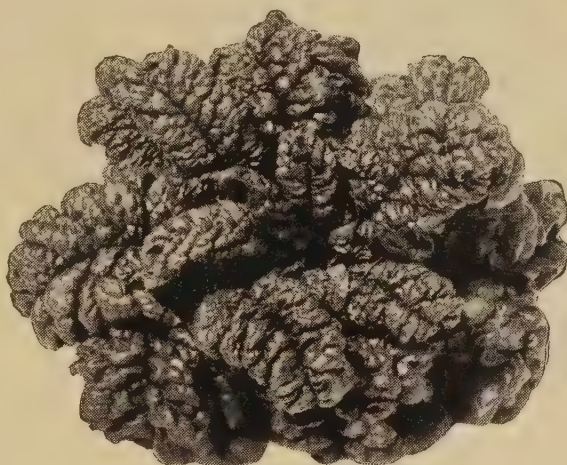
**OLD DOMINION.** (40 days.) Imported seed to meet the demands of the most critical trade. Used mostly for early spring crop. Long standing and mosaic resistant. Large dark green, heavily crumpled leaves.

**★LONG STANDING BLOOMSDALE.** 42 days. It is early and hardy, and a decided improvement on the old strain. Will stand 10 to 14 days before bolting to seed; has a heavier leaf texture, more crumpled or savoyed, and will also resist the heat much better. Suitable for quick freezing. **Pkt., 10c.**

**HEAVY PACK.** 48 days. This is a good strain of Viking. Plants are strong and vigorous with large, medium green, slightly crumpled thick leaves on short stalks. Color is intermediate between Nobel and King of Denmark. Suitable for quick freezing.



Long Standing  
Bloomsdale



Virginia Savoy Spinach

**VIKING.** 45 days. This new variety may well be described as a dark green Nobel. Excellent for market gardens and canning. Plant large, spreading, vigorous, thick and dark green. Suitable for quick freezing.

**★KING OF DENMARK.** 48 days. Imported seed to meet the demands of the most critical trade. A standard variety for market gardeners, for spring planting. It will stand longer than any other variety before going to seed. Leaves large, rounded, and somewhat blistered. Color very deep green. Heavy yielder and excellent quality. Suitable for quick freezing.

**ROUND SUMMER THICK LEAVED.** 45 days. An old standard. Grand Rapids growers use this variety very largely for main crop for spring, summer and fall. Suitable for quick freezing.

**GIANT NOBEL.** 45 days. An erect, vigorous growing, long standing Spinach, slow to run to seed. Leaves large, unusually broad, firm and thick, with rounded top. Smooth, medium green in color and the largest of any Spinach. Suitable for quick freezing.

**VIRGINIA SAVOY BLIGHT-RESISTANT SPINACH.** 40 days. Virginia Savoy is characterized by the large leaves and general Flanders type of growth. The low growing, wide-spreading habit makes it most desirable for winter Spinach. Plants of this type attain a very large size in late fall and carry well into early spring. A single plant often weighs more than a pound. Suitable for quick freezing.

**NEW ZEALAND.** 60 days. Entirely distinct from the other varieties. Plant tall and spreading, leaves medium green, rather small and pointed. Prickly seeded.

**Oz., 15c; 1/4 lb., 25c; 1 lb., 75c, postpaid.**

**Prices: Oz., 15c; 1/4 lb., 25c; 1 lb., 70c, postpaid. Not postpaid, 10 lbs., \$5.50; 25 lbs. or more, 50c per lb.**



Giant Nobel

★This variety recommended by Michigan State College



# Squash

**CULTURAL DIRECTIONS.** For Summer Squash, one ounce to 25 hills; two to three pounds per acre. For Winter Squash, one ounce to ten hills; about three pounds per acre. After danger of frost is past, plant eight to ten seeds to the hill for Summer sorts, about four feet apart, the last of May; and Winter varieties in hills about eight feet apart, from the middle of June to July first. Do not bruise or break the stems of Winter Squash when gathering. Store in a cool, dry place.

**EARLY PROLIFIC STRAIGHTNECK.** 50 days. A high yielding summer Squash. Fruits straight, smooth, and of delicate creamy color. Will grow 12 to 14 inches long but can be eaten when smaller. Quality unsurpassed.



Butternut Squash

**YANKEE HYBRID.** 50 days. The earliest, most productive summer Squash. Fruits are straight, smooth, attractive and of excellent quality. Very similar to the Early Prolific Straightneck, but this is a true hybrid and better for home and garden use.

**Oz., 75c; 1/4 lb., \$2.25; lb., \$6.50, postpaid.**

**SUMMER CROOKNECK.** 55 days. The largest and one of the earliest summer varieties; fruits often 2 to 2 1/2 feet long; very warty and deep orange in color.

**GOLDEN SUMMER CROOKNECK.** 55 days. A standard early and productive summer Squash; fruits about a foot long, moderately warted and of bright yellow color.

**ZUCCHINI.** 60 days. A well known Italian Marrow type. Fruits nearly cylindrical, straight. Color medium green, mottled with cream-gray and lighter green lace pattern and stripes; flesh firm and of delicate flavor. Suitable for quick freezing.

## The Four Hubbards

**GOLDEN HUBBARD.** 100 days. Similar to the Old Hubbard in form and habit, though smaller and decidedly earlier; shell moderately warted, rich orange-red; flesh deep orange, fine quality; good keeper.

★**IMPROVED HUBBARD.** 105 days. The standard winter Squash. Shell moderately warted; deep dark bronze-green; flesh bright yellow, fine grained, thick and dry.

★**CHICAGO WARTED HUBBARD.** 105 days. Similar in quality and form to the Hubbard, but fruit larger and a little later.

**BLUE HUBBARD.** 105 days. A new type of Hubbard Squash and said to excel all in the superior quality of its flesh. Similar to the original Hubbard but having a hard blue-gray shell.

**All Squash (except as noted): Oz., 25c; 1/4 lb., 85c; 1 lb., \$2.50, postpaid.**

**BANANA.** 105 days. A prolific, oblong variety 2 1/2 feet in length by 6 inches in diameter, having a grey-green shell.

**BANANA, PINK.** Similar to the regular Banana, but exterior deep pink. Fruits average 15 inches long and 6 1/2 inches in diameter, straight pointed at the blossom end, rounded at the stem end. Flesh thick with small seed cavity.

**MAMMOTH TABLE QUEEN.** 90 days. Similar to the regular Table Queen Squash, but larger in size. The quality is unsurpassed and it is a wonderful addition. Much in demand by both home and market gardeners.

**TABLE QUEEN** (Acorn or Des Moines.) 80 days. Extremely prolific; one of the most popular for home, market garden and shipping. Fruit pointed acorn shape; 5 1/2 inches long and 4 inches through, uniformly ridged; skin smooth, dark green; shell thin; flesh light yellow, bakes dry and sweet. Just right for cutting in half, baking and served to two people.

**UCONN.** (Bush Acorn.) 70 days. A bush variety with fruit similar to Table Queen, but a little smoother and slightly smaller. The runnerless growing habit requires less space per plant, but will produce many fruits per bush. All-America Selection Gold Medal 1950. Fruit is 4 1/2 inches long, 3 1/2 inches in diameter, acorn shaped, slightly grooved and ridged, shell thin, hard, smooth, dark green. Flesh is orange-yellow, rich flavor.

**DELICIOUS.** 103 days. The standard of excellence in winter Squashes. Fruits broad top-shaped, commonly 7 to 8 inches long; skin very dark green, fairly smooth rind, thin but hard; flesh extremely thick, bright yellow, fine grained, dry, without fiber, of highest quality.

**GOLDEN DELICIOUS.** 103 days. Valuable for canners because of high starch content and the bright red-orange color of the exterior. In shape and season practically the same as the original Delicious.

**BUTTERCUP.** 110 days. Rind thin and tough, dark green with narrow gray stripes and slight mottling. Orange flesh cooks sweet and dry. A small, thick-fleshed Squash of good storage and eating qualities.

**BUTTERNUT.** 90 days. A recent introduction which has become very popular in the New England states. Fruits 10 to 12 inches long with neck of about 4 inches in diameter which is solid flesh; the seed cavity is located in the lower bowl-shaped end. Skin light creamy brown, flesh yellow, fine grained and of excellent quality. Matures early and is a good keeper.

**COCOZELLA DI NAPOLI.** (Italian Vegetable Marrow.) 60 days.

**EARLY WHITE BUSH SCALLOP.** 60 days. Very early summer Squash.

**EARLY YELLOW BUSH SCALLOP.** 54 days. A true bush but larger than the above.



Improved  
Hubbard  
Squash

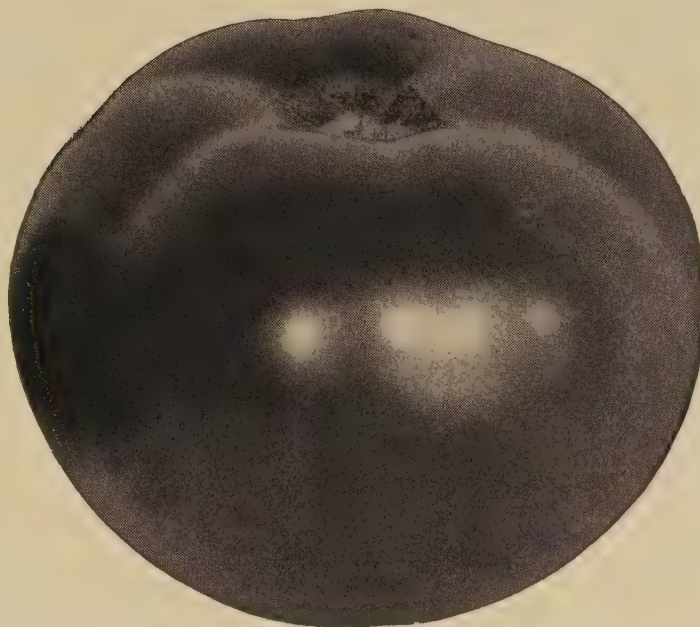


# Forcing Varieties of Tomatoes

*Grown in Greenhouses Everywhere*

**IDEAL FORCING.** Is the result of crossing the Bonny Best with the Comet and is a heavy yielding variety. It has no unripe core, is dark red in color, not an acid fruit but of excellent quality. It is larger than the old Grand Rapids Forcing, now no longer in production. It is a splendid shipper. Surely this Tomato has a place in every greenhouse and will be a money maker.

**Oz., 60c; 1/4 lb., \$1.70; 1 lb., \$5.00, postpaid.**



Michigan State Forcing Tomato

**MICHIGAN STATE FORCING.** 75 days. An excellent greenhouse variety and a vigorous grower with dark green foliage. Especially attractive medium size fruits (4 to 5 ounces) are borne in clusters of five to eleven. Stem cavity is small, shallow and very smooth. Blossom end well rounded with a very small scar, the outer walls of fruit are thicker, and the firmness of the fruit makes it possible to allow them to ripen on the vine without loss to the grower. Many growers have in late years done remarkably well with this variety for outdoor growing and it is to be recommended.

**Oz., \$1.00; 1/4 lb., \$3.00; 1 lb., \$9.00, postpaid.**

See page 31 for Spartan Hybrid and Northern Hybrid forcing Tomatoes.

## Standard Varieties of Tomatoes

**EARLIANA CERTIFIED.** 64 days. The most productive, first early red Tomato and a profitable sort for the market gardener. Vines are small but vigorous, fruits medium to large in size, exceptionally smooth and solid; color bright deep scarlet.

**VICTOR.** "All-America Selections." 65 days. Awarded Bronze Medal. This Tomato is a dwarf self-topping variety. It can be planted close, 5 feet by 3 feet. It sets fruit when other varieties fail. Is extra early, even ripening, with small vines. Color is uniform, scarlet and has a very noted smoothness of skin. A very solid Tomato that does not crack and is a good shipper.

**VALIANT.** 67 days. An early market variety. Vines sparse and open. The fruits, weighing about 8 ounces, are smooth, deep and brilliant scarlet in color.

**GROTHEN'S GLOBE.** 70 days. A much improved type over the Break o' Day, and while disease resistant the vines are heavier foliaged, growing large, upright, early, hardy and prolific. The fruit is bright red, large, globe shaped, firm, smooth and of good quality.

**BREAK O' DAY.** 70 days. The earliest disease-resistant, scarlet-fruited, meaty Tomato yet introduced; 10 to 12 days earlier than Marglobe and very productive.

**EARLY BALTIMORE.** Certified. 70 days. Selection of Marglobe, disease resistant, adapted to all soils. Fruit somewhat smaller, bright red color, and very prolific.

**STOKESDALE.** Certified. 70 days. A second-early scarlet fruited variety maturing about a week earlier than Marglobe. Plant rather open in habit with medium heavy foliage. Fruits large, globe or sub-globe, smooth and well colored.

**GOLDEN JUBILEE.** 72 days. Short stemmed, sturdy and compact, bearing over a long period. Fruit golden yellow, globular, thick walled, of mild flavor and good quality. Medium size.

**BONNY BEST.** Certified. 73 days. Unexcelled as a general purpose Tomato; particularly valuable for forcing under glass as a canning variety in northern sections. Fruits evenly colored bright deep scarlet-red; medium large; flattened globe-shaped; smooth and firm.

**Prices: Oz., \$1.00; 1/4 lb., \$3.00; 1 lb., \$9.00, postpaid.**

Turn to pages 30 and 31 for more Tomatoes





Pritchard or Scarlet Topper Tomato

**TOMATO, STRAIN "B."** 72 days from setting of plants in the field. A heavy-yielding variety selected for its exceptionally uniform production of large, smooth, attractive Tomatoes. Strain "B" produces attractive deep scarlet fruits that are deep-globe shaped, large and firm with thick walls.

**Oz., \$2.25; 1/4 lb., \$6.75; 1 lb., \$20.00, postpaid.**

**PRITCHARD or SCARLET TOPPER.** Certified. 75 days. Very productive early sort. The splendid, globe-shaped, smooth fruits grow to a good size and attain an attractive bright red color. Flesh firm, mild flavored, free from acidity, with no core and small seed cavity.

**LONG RED.** 75 days. Developed at the N. Y. Experiment Station. Plant is medium in size, with many branches; leaves small but abundant. Fruits are globular to deep globular of medium size, solid and well colored. This is not a long Tomato, as the name might signify. It is a globular variety the same as most other Tomatoes but the introducers called it Long Red as they claim it stays red longer, before rotting, than most other varieties.

**Oz., \$1.00; 1/4 lb., \$3.75; 1 lb., \$12.00, postpaid.**

**WISCONSIN No. 55.** (75 days from transplanting to first picking.) Plant vigorous, quite open, yet sufficiently dense to prevent much sun scalding, with considerable tolerance to blossom end rot and some tolerance to early blight. Fruit set moderately heavy. Fruit scarlet, slightly oblong.

★**JOHN BAER.** Certified. 73 days. An early, productive, red Tomato.

**MARGLOBE.** Certified. The Wilt and Nailhead Rust-Resistant Sort. 75 days. Was produced by crossing Livingston's Globe with one or more other varieties. It is a vigorous grower whether in greenhouse or field. A bright red in color, of large size, almost round, and very productive. It is very promising.

**Pkt., 90c; 1/4 lb., \$2.70; 1 lb., \$8.00, postpaid.**

**EARLY DETROIT or GULF STATE MARKET.** 77 days. Particularly valuable for shipping. Fruits purplish pink, large and of uniform size. Globe-shaped, smooth and firm.

**EARLY RUTGERS.** Certified. 73 days. This is an early strain and has a thick outer and inner wall of solid meat. Globe shaped, scarlet-red in color, resembling Marglobe. The Early Rutgers Tomato is in great demand for all purposes.

**Pkt., 90c; 1/4 lb., \$2.70; 1 lb., \$8.00, postpaid.**

**DWARF STONE.** 81 days. The best of the dwarf Tomatoes. Fruits large, smooth, very solid, of a deep scarlet color.

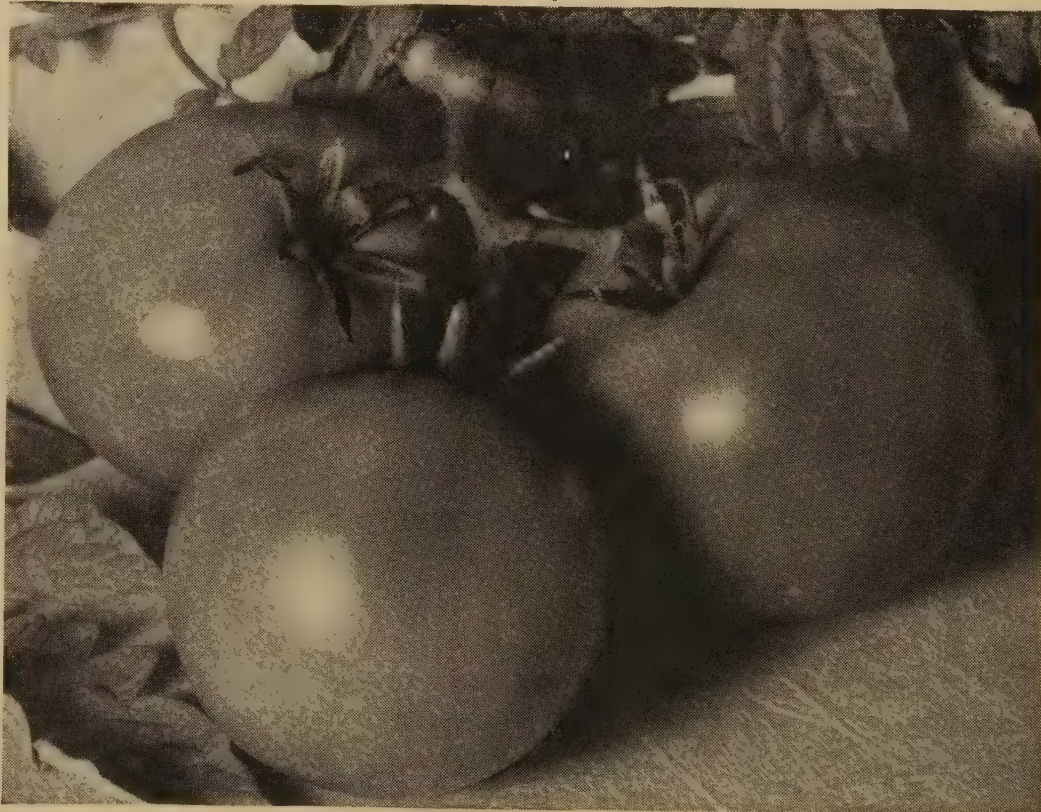
**GREATER BALTIMORE.** Certified. 83 days. Second early and main crop variety. Deep scarlet-red in color, vigorous and very productive. Preferred by canners on account of its heavy yield.

**Prices, except as noted: 1 oz., \$1.00; 1/4 lb., \$3.00; 1 lb., \$9.00, postpaid.**



**DOW SURE SET** plant growth control agent for improving the fruit set on field Tomatoes. Last season wonderful results were obtained in the field trials at Michigan State College.

**1/2 pt. size (mix with 3 gals. water and spray the blossoms), \$1.75.**



CERTIFIED John Baer Tomato



**NEW STONE.** 85 days. The standard and general favorite with truckers and canners. Always dependable, very vigorous and productive; fruits round, large, solid, smooth, and deep red in color.

**Oz., \$1.00; 1/4 lb., \$3.00; 1 lb., \$9.00, postpaid.**

**PONDEROSA.** 85 days. A very large, purple-fruited Tomato; solid, with but few seeds, and no acid. Fine for slicing.

**Oz., \$1.35; 1/4 lb., \$4.00; 1 lb., \$12.00, postpaid.**

**BEEFSTEAK.** (Red Ponderosa.) 90 days. A wilt-resistant, large variety for home and market garden use. Plant is open in habit of growth, heavy. The fruit is large, flat, scarlet, rather smooth.

**Oz., \$1.00; 1/4 lb., \$3.00; 1 lb., \$9.00, postpaid.**

**OXHEART.** 90 days. An attractively pink-skinned variety. It is exceedingly smooth and tender and almost seedless. It has that delicious mild flavor. Rich soil adds greatly to its productiveness. A late variety.

**Oz., \$2.00; 1/4 lb., \$5.00; 1 lb., \$15.00, postpaid.**

**STANTON GARDEN TOMATO.** This new garden Tomato was developed by F. W. Stanton of Holland, Mich. Foliage is moderate and covers the fruit very well. Fruits are globe-shaped, uniform in size, about 2 1/2 to 3 inches in diameter. Medium to dark red color, solid fruit, some with very few seeds. Sold only in sealed packets of true hand counted and tested for germination, as follows:

**25 seeds, 25c; 100 seeds, 90c; 250 seeds, \$1.75; 500 seeds, \$3.00; 1000 seeds, \$5.00, postpaid.**

**SMALL FRUITED TOMATOES.** Used for pickles, preserves, canning, etc. Easily grown and yield well. Yellow Plum, Red Pear, Yellow Pear, and Red Cherry. Price of any of the four varieties:

**1/4 oz., 30c; oz., \$1.00, postpaid. Special: One pkt. each of these four varieties for 50c, postpaid.**

#### SEED TREATMENT PAYS

Treat your seeds with Semesan disinfectants and assure yourself of a crop.

Seed treatment pays no matter what kind of seed is treated. We handle a complete line.



Oxheart Tomato

**STOKESCROSS No. 4.** 5 1/2 ozs. fruit ripens 80 days from transplanting. This brilliant F<sub>2</sub> hybrid is already established as a Tomato of enormous importance. Its hybrid vigor is at once seen in its ability to produce large, solid, highly flavored fruit in quantity, fully 10 days in advance of Rutgers. Under normal weather conditions it will be almost crack free, a factor probably due to its deeper root system.

**STOKESCROSS No. 1 (1951).** Formerly known as Stokesdale No. 2. 4 1/2-oz. fruit that ripens 70 days from transplanting. This new F<sub>1</sub> hybrid has been bred in Cuba, and is especially recommended for use by Tomato growers who can profit by a prodigious production of early ripening, brilliant fruit. It is essentially a market garden Tomato but it is likely to find an important place with the processors of the more northerly Tomato districts. The fruit somewhat resembles Stokesdale but the plant is far more robust and will furnish better coverage. It carries a sparkling rich Tomato flavor.

**1/4 oz., \$1.25; 1/2 oz., \$2.00; 1 oz., \$3.75; 4 ozs., \$10.00, postpaid. Available in larger quantities and special prices quoted on request.**

## Hybrid Tomatoes For Forcing

"Just a Little More of Everything"

Two important Hybrid Tomatoes, bred and grown by Mr. Roy H. Burghart, and introduced to the trade as a better and more vigorous Tomato that is more resistant to wilt and disease. They are ideal greenhouse forcing hybrids, and have "just a little more of everything" that is desirable in a Tomato. With increased production at a lower cost, we are able to offer these at lower prices, enabling greater distribution and a better crop at lower cost.

**SPARTAN HYBRID.** This is a cross between Michigan State Forcing and Cooper's Special, and is an excellent greenhouse hybrid, a week earlier than the parents and about 20 per cent more productive in weight and fruit. Color red, globular shape, medium size fruit, 5 to 6 ounces in weight, about three to pound; growing in clusters six to eight. A meaty Tomato, small seed cavity. Vine is more open, giving very uniform ripening of fruit. Being extra vigorous in growth, it is more resistant to both wilt and disease.

**NORTHERN HYBRID.** This is a cross between Michigan State Forcing and Sutton's Best of All, and is an ideal greenhouse hybrid for northern growing, especially in CANADA and northern United States. In productivity it is similar to Spartan Hybrid, but is more vigorous in growing, particularly in dark fall and winter weather which is prevalent in the North. Vine is open, permitting uniform ripening. Fruit is red in color, globular in shape, but is smaller, 4 to 5 ounces of solid fruit in clusters of ten to twelve. More resistant to wilt and disease on account of its vigorous growth.

**Both of these Hybrids are put up in sealed packets: 50 seeds, \$1.00; 100 seeds, \$1.50; 250 seeds, \$2.50; 500 seeds, \$4.00; 1000 seeds, \$7.50; 1/4 oz., \$12.50; 1/2 oz., \$20.00; oz., \$35.00, postpaid.**

**HYBRID TOMATO, FOREMOST E-21.** This is at least 10 days earlier than Rutgers in our Michigan plantings. Fruits are almost globular, deep scarlet-red, larger than Stokesdale and just about as large as Rutgers. They are notably resistant to cracking and blossom end scars. The intermediate vine has somewhat less spread than Rutgers, but the plants are extremely vigorous and heavily productive. The fruit sizes have been well maintained right up to the end of the season.

**Trial packets containing about 200 seeds: \$1.00; 1/4 oz., \$2.75; 1/2 oz., \$5.50; 1 oz., \$10.00, postpaid.**

All prices quoted herein are subject to change without notice.



# Turnips

**CULTURAL DIRECTIONS.** One ounce to 150 feet of drill; one pound per acre. For main crop, sow in July or August. Sow either broadcast or in drills.

**EXTRA EARLY WHITE MILAN.** 40 days. The earliest bulbs, small, clear white, and flat. One of the best for early bunching.

**Cz., 20c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.**

★**PURPLE TOP WHITE GLOBE.** 55 days. Not so early as White Egg, perfect globe in shape. Flesh and skin white, colored purple or red above ground. Very fine grained and sweet. The most attractive Turnip and best seller. **Pkt., 10c.**



Yellow Globe Turnip

**YELLOW GLOBE.** 75 days. A round, smooth, light yellow variety of medium size and good quality.



White Egg Turnip

**PURPLE TOP STRAP LEAVED.** 45 days. A very early, flat variety, medium size; purple or red above ground and white below.

**GOLDEN BALL.** 65 days. Tops small, roots medium size, round, smooth and deep yellow. Fine grained, flesh firm, crisp and sweet.

**WHITE EGG.** 55 days. An early egg-shaped variety. Roots smooth, clear white. One of the best for market.

**COW HORN.** 65 days. Roots long, slightly crooked; clear white. Often sown to plow under for fertilizer.

**YELLOW ABERDEEN.** 75 days. A late, medium sized, long keeping variety; roots round, yellow with a purple top, flesh tender.

**SEVEN TOP.** 45 days. For Turnip greens. Extremely hardy foliage Turnip for table or forage use. Crown sends up numerous shoots which are excellent for greens.

**Prices (except as noted): Oz., 15c; 1/4 lb., 45c; 1 lb., \$1.25, postpaid.**



Purple Top White Globe Turnip

All Prices quoted herein are subject to change without notice.



## Tuberoses, Double

(Polianthes Tuberosa)

**EXCELSIOR DWARF PEARL, DOUBLE.** Easily recognized by its exquisite fragrance and beautiful flower spike; long stems, making it an ideal cut flower. Top size. 20c each; \$2.00 per doz., postpaid.

## Begonias

Tuberous-Rooted

Unexcelled for summer bedding.

**CAMELLIA-FLOWERED DOUBLE.** Crimson, copper, salmon, scarlet, yellow, orange, pink and white. Size 2 inches and up. Large size. Each 35c; 3 for \$1.00; 6 for \$2.00; 1 doz., \$4.00 postpaid. Kindly give the colors wanted.



Tuberous-Rooted Begonia



Tuberoses

## Cannas

These new varieties with large flowers are unequalled for creating a colorful show from July till frost. They do best in full sun and respond quickly to feeding.

**HUNGARIA.** 3½ ft. Best pink Canna. Leaves bluish green, never burn. Flowers are large with big petals.

**KING HUMBERT.** 4 ft. Scarlet flowers; bronze leaves. A "Gold Medal" Sensation.

**THE PRESIDENT.** 4 ft. A rich, glowing scarlet on strong stalks; green foliage.

**YELLOW KING HUMBERT.** 4 ft. Foliage a very dark green; flowers deep rich yellow, softly spotted and blotched with bright red.

Prices on any of the above: 15c each; \$1.75 per doz., postpaid.



Cannas

## Gladiolus

Our "Grand River Collection" of Gladiolus is fully listed on the outside back cover. For all the others see pages 34 and 35.

"A thing of beauty is a joy forever."



# Gladiolus

## OUTSTANDING VARIETIES

State inspected, treated with an insecticide and fungicide, ready to plant.

**60c per doz.; \$4.25 per 100.**

- BAGDAD.** Decorative. Large flowers and tall. A smoky old rose.  
**BEACON.** Exhibition. Bright rose-scarlet with a large cream throat. Somewhat ruffled, tall and very showy.  
**BIT O' HEAVEN.** Exhibition. Flaming orange with yellow throat.  
**EARLY ROSE.** Deep rose, one of the earliest to bloom.  
**★ETHEL CAVE COLE.** Large, wide open florets of delicate pink; nice substance.  
**★LANTANA.** Large flowers in vivid orange shades.  
**MAUVE MAGIC.** Long slender spikes of deep mauve.  
**★PURPLE SUPREME.** Exhibition. Tall, slender plant with well placed, bright purple blossoms.  
**QUEEN OF BREMEN.** Decorative. Soft lavender-pink. Makes beautiful floral arrangements.  
**ROCKET.** Exhibition. Flaming scarlet.  
**SILENTIUM.** Decorative. Pure white with rose blotch, plant grows tall and always straight with a slender willowy stem.  
**★SNOW PRINCESS.** Exhibition. A very fine white of good size and form. Tall, with long flower spike and many open blooms that are always perfectly placed. Stems never crook. Mid-season.



Picardy

**75c per doz.; \$5.75 per 100.**

- ANNAMAE.** Early; snowy white; reliable bloomer.  
**BIG TOP.** Immense light pink with carmine feather.  
**BLACK OPAL.** Exhibition. Deep maroon-red.  
**BLUE BEAUTY.** Exhibition. Light blue shading darker toward the edge.  
**★BUCKEYE BRONZE.** Decorative. Smoky bronze.  
**BURMA.** Exhibition. Large ruffled, deep rose.  
**CORONA.** Exhibition. Cream-white shading more creamy toward the throat, with wide rose picotee edge on all petals. Very distinctive and beautiful. Six to eight very large, wide open blooms on a head of 18 buds. Tall grower and a fine propagator.  
**★ELIZABETH THE QUEEN.** Exhibition. Giant ruffled lavender.  
**DR. WHITELEY.** Large yellow-apricot or buff, tall stems.  
**HEAVENLY WHITE.** Exhibition. White flushed with lavender.  
**HIGH FINANCE.** Exhibition. Light smoky orange-gray with cream throat. A beautifully distinctive shade, and opens up to 9 lightly ruffled blooms with rolled back petals.  
**JEANNIE.** Decorative. Beautiful, distinctive, large clear pink and white midribs and creamy throat. Tall, strong grower.  
**KING BEE.** Exhibition. Beautiful salmon-scarlet with self flecks. Commands attention.  
**★LADY JANE.** Exhibition. Large cream, fine texture.  
**LAVENDER AND GOLD.** Decorative. Lavender. Medium size.  
**LEADING LADY.** Decorative. A cream-white, with canary-yellow throat. Real large. Similar to Picardy, except in color.  
**MARGARET BEATON.** Exhibition. Pure snow-white with small scarlet blotch in the throat. Flowers very large, on a long spike.  
**ORANGE GOLD.** Genuine orange self, smooth, tailored flower on tall stems.  
**PANDORA.** Clear, soft geranium-pink, with darker lines in throat.  
**PICARDY.** Exhibition. Delicate apricot-pink. Flowers are all extremely large and of heavy waxlike substance.  
**★RED CHARM.** Exhibition. Very attractive shade of medium red. Fast becoming the most popular all-purpose red.

Black  
Opal



★Starred varieties are among our Grand River Collection.



75c per doz.; \$5.75 per 100.

- ★**ROSA VAN LIMA.** Exhibition. Light rose with darker lines in throat. Opens up to eight or more well-placed blooms on tall, straight spike.
- ★**SPOTLIGHT.** Decorative. Large, deep yellow, with red blotch. Florets are of large size and are perfectly placed. One of the finest that is grown.
- VAGABOND PRINCE.** Exhibition. Iridescent garnet-brown with a scarlet blotch. Most unusual, and is lovely arranged with scarlets.
- WHITE GOLD.** Decorative. Very large clear light cream, shading to a lighter throat. Four to six huge blooms open on a long flower head.

\$1.00 per doz.; \$7.95 per 100.

- ALGOMA.** Color novelty and exhibition variety, buff-pink with red throat blotch.
- AUREOLE.** Richly ruffled yellow, exceptionally heavy substance.
- BETTY'S CHOICE.** Nicely ruffled, rose-mauve with cream throat, petals edged cream.
- COVER GIRL.** Tall, bright pink. Opens 10-12 blooms.
- CRINKLE CREAM.** Large ruffled pale yellow with a pale green throat.
- ELOISE.** Tall soft lavender, many open.
- GENGHIS KHAN.** Rich salmon, heavy substance and intensely ruffled.
- MAGNOLIA.** Large flowers of light creamy rose.

Maid of Orleans

- MARIMBA.** Nice buff-pink, tall.
- CGARITA.** Tall deep pink, with yellow throat.
- SPIC AND SPAN.** Tall ruffled deep pink, many open.

- SILVER WINGS.** Heavily ruffled glistening white with a touch of cream in the throat.
- W. R. READER.** Wide open blooms of deep salmon-rose.



The following list of varieties are original importations from the Netherlands, grown and inspected in Michigan. Early ordering is advisable, as the stock of some of these varieties is limited.

	Each	Doz.
<b>ABU HASSAN.</b> Dark violet-blue, strong, slim stems .....	\$0.10	\$1.00
<b>ARANJUEZ.</b> Early orange, yellow throat, good spike .....	.10	1.00
<b>BOULOGNE.</b> Beautiful wine-red, many blooms open .....	.10	1.00
<b>GEN. EISENHOWER.</b> Enormous florets deep begonia-rose .....	.15	1.50
<b>HARRY HOPKINS.</b> Attractive Bordeaux-red of heavy texture ..	.15	1.50
<b>HOPMAN'S GLORY.</b> Good clear yellow .....	.10	1.00
<b>JOHAN VON KONYENBURG.</b> Large glowing orange-vermilion ..	.10	1.00
<b>MANSOER.</b> Blood-red, shading to velvety black .....	.10	1.00
<b>MARSHALL MONTGOMERY.</b> Warm, deep maroon-red .....	.20	2.00
<b>MORNING KISS.</b> Large pure white, pale pink deep in throat ..	.10	1.00
<b>MUSIO CLEMENTI.</b> Early soft grayish blue, deeper throat ....	.15	1.50
<b>NEW YORK.</b> Deep carmine-red, many open .....	1.00	
<b>PAUL RUBENS.</b> Large dark reddish violet, tall stems .....	.10	1.00
<b>PRESIDENT TRUMAN.</b> Enormous light feathered rose .....	.10	1.00
<b>RAVEL.</b> Medium violet-blue, brown throat marks .....	.20	2.00
<b>TIVOLI.</b> Beautiful soft rose, many open .....	.15	1.50

ALL BULBS LISTED ARE SUBJECT TO THE 3% MICHIGAN STATE SALES TAX, and are postpaid anywhere in Michigan. Elsewhere, the postage will be extra, and as we cannot tell what the weight will be we would suggest that you send us enough, as any money that is not needed will be promptly refunded. See postal rates on page 3.

Something Choice

"A thing of beauty is a joy forever"

Our "Grand River Collection" of Gladiolus bulbs listed on the outside back cover of this catalog is really a "thing of beauty." It is a wonderful value, giving you 4 varieties of the 60c bulbs and 6 varieties of the 75c bulbs. A total of 100 bulbs for only \$4.00, postpaid anywhere in the state of Michigan.

GLADIOLI MIXTURES

- 20 large size bulbs, 10 or more varieties in the mixture, giving complete color range .....\$1.00
- 30 medium size bulbs, 10 or more varieties in the mixture, giving complete color range ..... 1.00
- In ordering, state which mixture you want, either the large or the medium size.

★Starred varieties are among our Grand River Collection.





# Tulips, Hyacinths, Crocus, Daffodils, Narcissus for Fall Planting

These are imported bulbs from the Netherlands, and will not be available until September 15th, 1952, at which time we will be glad to quote prices on request.

## Tulips, Darwin (Top Size)

**BARTIGCN.** Fiery crimson with pure white base. Strong stem. Excellent for forcing. 24 inches.

**BLEU AIMABLE.** Bright lilac-blue, shaded steel-blue, inside darker with a blue base. 29 inches.

**CLARA BUTT.** Clear salmon-pink with a white base flecked blue-gray. 26 inches tall. An old favorite.

**GOLDEN AGE.** Large, deep golden yellow, slightly shaded orange when fully developed. 26 inches tall. Fine shape.

**LA TULIPE NOIRE.** The black Tulip. Deep maroon-black. Definitely the closest to a real black. 26 inches tall.

**PRIDE OF HAARLEM.** One of the best known and most popular varieties. Brilliant cerise-scarlet with a blue base. 28 inches tall.

**PRINCESS ELIZABETH.** Lovely soft rose-pink with lighter edges and a white base. Good forcing variety also 26 inches tall.

**SCARLET BEAUTY.** Beautiful, bright vermilion-scarlet with a dark blue base edged white. 26 inches tall.

**THE BISHOP.** Beautiful deep violet with a small, dull blue base edged white and purple anthers. 29 inches tall.

**ZWANENBERG.** Large pure white with black anthers. Tall stem. A very popular variety. 28 inches tall.

AS WELL AS MANY OTHERS



Hyacinths

## Narcissus and Daffodils

(No. 1 bulbs)

**KING ALFRED.** Golden yellow. Broad perianth and a large trumpet frilled at the mouth. Popular. 16 inches.

**MRS. E. H. KRELAGE.** Pure white perianth and a creamy white trumpet recurving at the brim. 20 inches.

**SPRING GLORY.** Pure white perianth and a deep golden yellow trumpet, recurving at the mouth. 18 inches.

**LAURENS KOSTER.** (Poetaz). Creamy white perianth and a lemon-yellow center. Very fragrant. Several flowers on a stem. 14 inches.



Darwin Tulip

## Hyacinths (17-18 cm.)

**CITY OF HAARLEM.** Large pure yellow. Compact blossom of fine form.

**GRAND MAITRE.** Deep lavender-blue. Very large spike.

**LA VICTOIRE.** Bright carmine-rose. Large spike and a very fine, sturdy stem.

**L'INNOCENCE.** Pure white. Large spike with large bells.

**QUEEN OF THE PINKS.** Bright rose-pink. Enormous, compact spike.

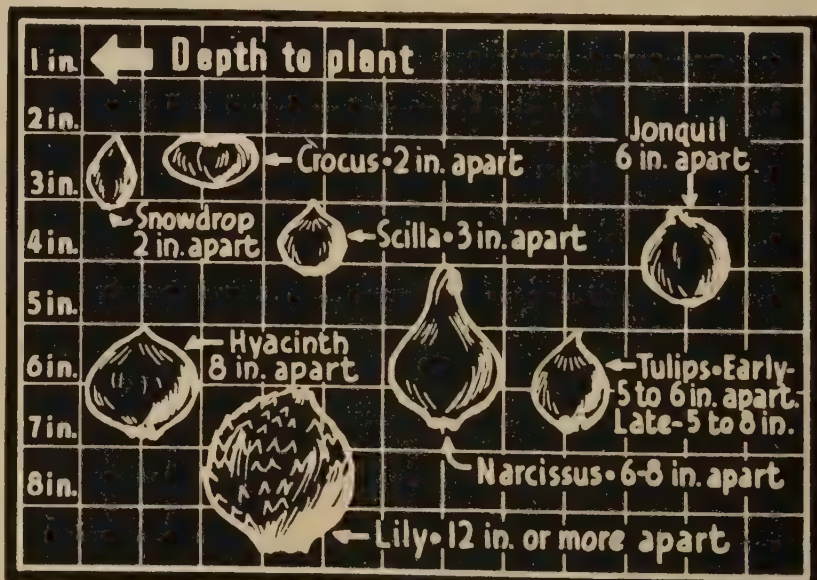
## Crocus (Top Size)

**KATHLEEN PARLOW.** Large pure white with yellow anthers.

**KING OF THE STRIPES.** Large white with purple stripes.

**MAMMOTH YELLOW.** Large golden yellow.

**PURPUREA GRANDIFLORA.** Rich, deep purple. Immense flowers.





# ANNUAL FLOWERS



## PHLOX DRUMMONDI

The annual Phloxes are dazzling in effect, particularly so when sown in masses or ribbon beds of contrasting colors. Phlox Drummondii is unsurpassed for variety of colors. Pkt., 10c; 1/4 oz., 60c; oz., \$1.75.



## SNAPDRAGONS

For gorgeous coloring few flowers can match Snapdragons. Fully listed and described on page 54.

## LARKSPUR

**GIANT IMPERIAL.** 3 ft. tall. Derives its name from the striking resemblance of the flowers to the Double Hyacinth. Delicate colors. Pkt., 10c; 1/4 oz., 30c; oz., 85c; 4 ozs., \$2.50.



Larkspur

## SHIRLEY POPPIES

Lovely and dainty shades. Many edged and shaded with other colors. Either Single Mixed or Double Mixed. Described on page 53.



Shirley Poppies



# Garden Beauties

## CALENDULA

Orange King and The Ball are both listed on page 45. Favorites for cut flowers Pkt., 10c; 1/4 oz., 15c; oz., 50c; 4 ozs., \$1.50.



Calendula

Petunia,  
Fire Chief

## PETUNIAS

The Petunia loves rich soil and thrives best in a sunny location. Pinch back freely. This causes the plant to branch out and spread, shading the ground, thereby helping to conserve the moisture. Keep the faded flowers clipped. Our list on pages 50 and 51 gives full description of all the varieties.

**FIRE CHIEF**, illustrated above, is a firecracker-red, which is the best way to describe it. It's a new All-America selection which was given the rare "Gold Medal." Pkt., 35c; 1/8 oz., \$1.75; 1/4 oz., \$3.25; oz., \$12.50.

## WILT-RESISTANT ASTERS

**GIANT CREGO**. The flowers are of immense size, usually from 4 to 5 inches in diameter and borne on stems 12 inches or more in length. Mixed, all colors, pkt., 10c; 1/4 oz., 35c; oz., \$1.00; 4 ozs., \$2.50.

**QUEEN OF THE MARKET**. Best early Aster, usually in full bloom 2 weeks before most others begin to blossom. Graceful spreading habit. Mixed, all colors, pkt., 10c; 1/4 oz., 35c; oz., \$1.00; 4 ozs., \$2.50.

Asters



## PANSIES

A favorite in any garden. May be seeded in the spring for late summer and fall flowers. Turn to page 52 for complete details.

Pansies





# Anyone Can Grow

## MORNING GLORY

Deservedly very popular as they are one of the most free flowering and rapid plants in cultivation and the beauty of their brilliant flowers is unsurpassed. Illustrated is the GIANT CORNELL. Red with white edge. For the others turn to page 49.

Morning  
Glory,  
Giant  
Cornell



## PORTULACA

This plant will grow and bloom profusely in dry, hot situations. Ideal for rock gardens to fill in between the stones. Will form the loveliest of floral carpets. **Double Mixture, pkt., 10c; 1/4 oz., \$1.50; oz., \$4.25. Single Mixed, pkt., 10c; 1/4 oz., 45c; oz., \$1.25.**

Portulaca



Tithonia,  
Torch

ALL-AMERICA SELECTION 1951

## TITHONIA (TORCH FLOWER)

A quick growing summer annual that thrives on hot weather, as easy to grow as a Zinnia. Brilliant orange-scarlet flowers resemble a Dahlia, borne on long, stout stems on a compact plant waist high. A cut flower for garden use, blooms cut in the bud will open and last several days. Subject to no pests or disease. **All-America Selection 1951. Pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.50.**

## MARIGOLD

**HARMONY.** 12 to 14 inch. An annual dwarf French Marigold having scabious-like flowers of deep orange with maroon collars of broad petals, crested centers. Usually free flowering and very early. **4 ozs., \$3.75; 1 oz., \$1.10; 1/4 oz., 35c; pkt., 10c.**

Turn to page 48 for all others, as we have several others that are leading varieties that you may want to plant in your garden.

Marigold





# Annual Flowers

## THAT SHOULD BE IN EVERYONE'S GARDEN SALVIA

A hedge or bed of Salvia is a blaze of color during late summer and fall, bloom in spikes and continue to bloom until killed by frost.

Complete listing of all varieties both early and late are on page 53.



Salvia

## BACHELOR'S BUTTON

A very popular annual that will always charm by its simple beauty. See page 45.

**CYANUS MIXED.** 4 ozs., \$1.50; oz., 50c; 1/4 oz., 15c; pkt., 10c.

Bachelor's Button



Beautiful "Cuthbertson"  
Sweet Peas

## SWEET PEAS

To grow Sweet Peas successfully it is necessary to plant **early**, preferably on the Good Friday before Easter for an abundance of bloom and summer flowers.

A great many people prefer to grow Sweet Peas in a variety of mixed colors. Our superb Cuthbertson mixture is made up of all the best varieties obtainable, and is worthy of a place in any garden.

**Pkt., 10c; oz., 25c;**  
**1/4 lb., 65c; 1 lb.,**  
**\$2.00.**

## PETUNIA, BLUE BEDDER

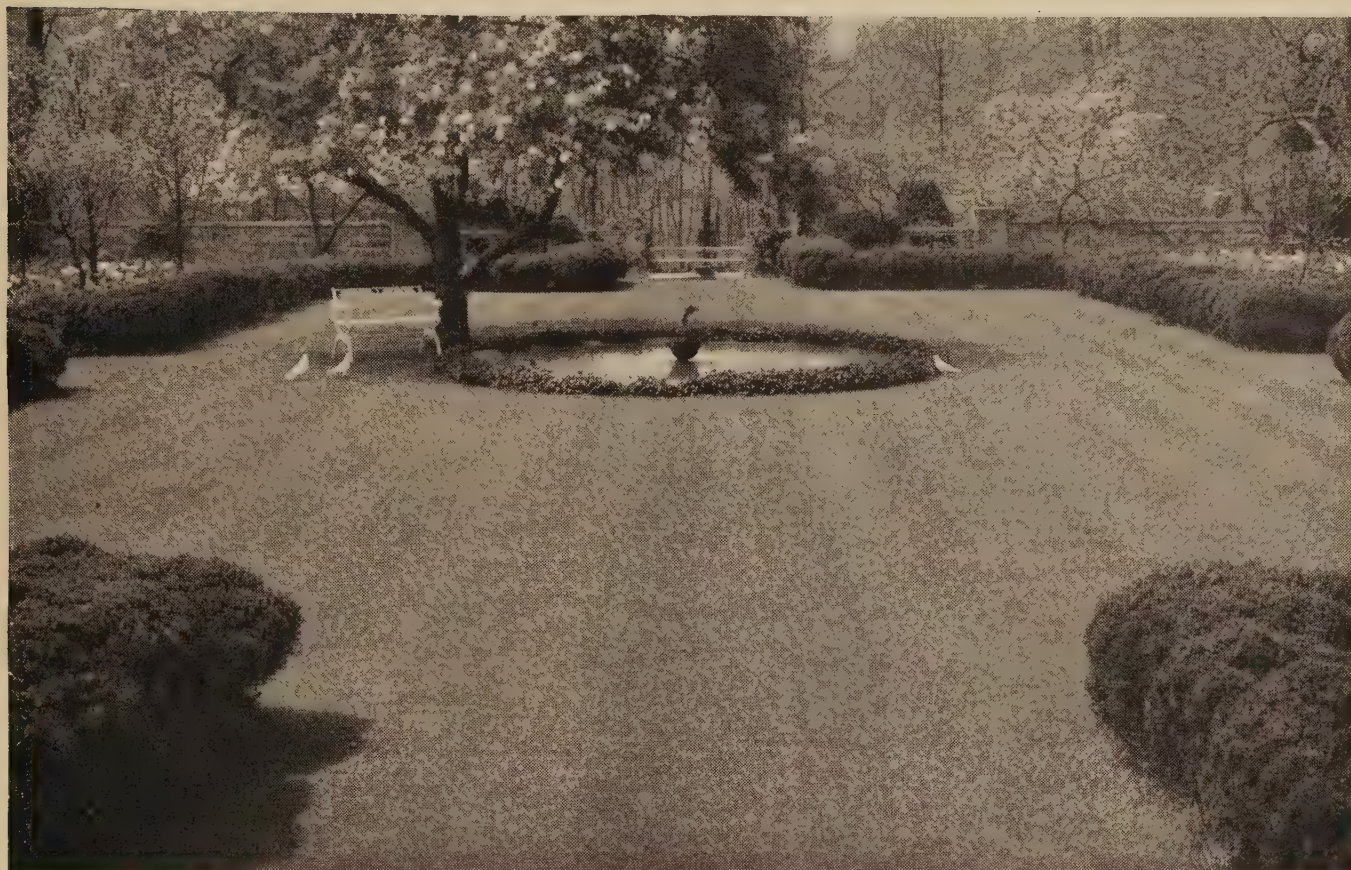
Is a Hybrida, Nana Compacta type. It is dwarf, free flowering, 12- to 16-inch plants bearing many medium sized plain edged single flowers. Ideal for beds and borders. **Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.**

Petunia





# Making a Lawn and Its Care



## Preparing the Soil

The most desirable soils for the lawn are the "loams", but if the soil available for the building of a lawn is a tight clay, sand should be added, or if a sandy loam, humus is needed, which would make it as nearly a loam as possible.

Even such simple tasks as spading are important and should be done with care. The depth of the surface soil largely determines the depth to which one should spade. If the top soil is six inches or less in thickness, work it to the depth of the surface soil. Never turn up the subsoil.

To get the best results from spading, each shovelful of soil is turned over and placed upon the edge of the hole away from the spader. It is then pulverized with a tap of the spade. This not only breaks up the mass, but carries the granulated soil back into the hole from which it was originally taken.

After the spaded soil has been pulverized, grade the soil to slope gently from the house. The grading will prevent water from standing around the foundation of the house. Next, level and roll until the seedbed is firm.

## Applying Plant Food

When the seedbed has been completed, Vigoro, the complete balanced plant food, or Milorganite should be applied. The lawn is never so effectively fed as before the grass seed is sown. The plant food should be applied and spread evenly over the surface of the soil at the rate of 4 pounds per hundred square feet, and worked into the top few inches.

## Sowing Seed

After the plant food has been worked into the soil, the seed should be spread uniformly over the surface at the rate of 4 or 5 pounds per one thousand square feet of soil. The seeding should be done by going in both directions to get an even distribution, both at the ends as well as the center of the throw.

A covering of clean straw or coarse cheesecloth on the steep slopes will help prevent washing which may occur before the grass becomes established.

## Feeding

About 8 or 10 weeks after the lawn is seeded the young grass should again be fed with either Vigoro, the complete balanced plant food, or Milorganite. The application is made at the rate of 2 pounds per hundred square feet of lawn.

The plant food should be brushed from the grass with a broom or the back of a rake and the lawn should immediately be given a thorough soaking to wash the fertilizer from the grass and carry it into the soil. If the plant food is allowed to remain on the grass and moisture should reach it the result would be a burning of the tender leaves. To prevent this, a thorough watering is very essential.

Well-fed grass withstands the inroads of weeds and also resists injury from the attack of certain diseases, and by regular feeding with an application of Vigoro or Milorganite will reduce the amount of reseeding necessary. The greater development of the root system and the ability to store up reserves of food material, make well-fed grass able to withstand the extremes of either winter or summer weather and to maintain a dense turf year after year.



Special care must be given the lawn throughout the hot summer months, as Kentucky Blue Grass needs a resting period in mid-summer, and Red Top will grow most anywhere and has its resting period in the fall after the Kentucky Blue Grass has recovered. If excellent growth and vigor have been maintained during the spring, the lawn can be kept in a green vigorous condition during the summer, by careful watering, feeding and clipping.

At the approach of fall, lawns should again have a thorough application of either Vigoro or Milorganite, applied at the rate of 4 lbs. per hundred square feet, and the lawn should be thoroughly soaked, following the application, as stated above.

## Care of the Lawn

Young grass should be allowed to grow three inches high before the first cutting, but on established lawns the grass should be cut quite short until the middle of May. Fertilize it well and try to get a complete ground cover, and after this has been accomplished, keep it cut as long as possible. Lower the wooden roller on your mower or better still, alter it or secure one that will cut three inches high. Plenty of leaf growth will shade the grass roots in hot weather and best of all, provide a laborless way of preventing weeds and crab grass from seeding, as weeds will not grow in a thick shady stand of grass and crab grass will not germinate even in semi-shade.

Whenever you are applying water to an established lawn be liberal with the amount used, as the water should penetrate 4 inches to do any good, and light sprinklings do injury—not good; they are about the worst treatment you can give your lawn.

It is best to water only once a week on clay soil, but it should be applied so that the water is quickly absorbed into the soil. Sandy soils dry out more quickly, and lighter and more frequent waterings are necessary.

## Grade "A" Sunny Lawn Mixture

This is our own mixture, containing Kentucky Blue Grass, Fancy Red Top, Red Creeping Fescue, Chewings Fescue, Rye Grass, and 10% pure White Clover. Wonderful results are and have been obtained with this mixture. We use only the very best of seeds obtainable, of lasting value and hardiness, giving you a beautiful and permanent lawn that will last for years.

## Grade "A" Shady Lawn Mixture

Contains Chewings Fescue, Poa Trivialis, Kentucky Blue Grass and Red Top. This mixture is our own, being mixed by ourselves especially for shady spots. We use only the very best seeds obtainable and as more care and attention is required we have used the hardier grasses, that will make a dense, thick growth in light soils and a satisfactory lawn in shady places or where sun is available only part of the time.

Inasmuch as we mix our own grass mixtures we have the individual grasses for those who want straight grasses in one spot or another.

**KENTUCKY BLUE GRASS, JUNE GRASS.** One of the best grasses for permanency. For lawns or pasture, it has no superior. Does well in any soil and stands the summer heat remarkably well. As it takes some time to become established, it is usually sown in mixtures.

**RED TOP.** A very hardy perennial grass, succeeding best on moist land. Valuable for lawn or pasture, and will produce large crops of good hay.

**DOMESTIC RYE.** An annual, coarser than blue grass, used extensively on banks and terraces.

**ENGLISH or PERENNIAL RYE GRASS.** A lawn grass where quick results are wanted.

**WHITE CLOVER.** (Dutch). A small, low growing variety. It is largely used in lawns and pastures. It makes a small, close, compact growth covering the ground like a carpet. Its blossoms are round, white and sweet scented, with leaves of bright green color.

**POA TRIVIALIS.** (Rough Stalked Meadow Grass). Closely related to Kentucky Blue Grass. Mostly used in shady places but will thrive in any soil.

**CHEWINGS FESCUE.** Valuable on sandy soil and in the shade. It is a perennial grass with a fine blade and spreading root system.

**RED CREEPING FESCUE.** One of the best Fescues obtainable. It spreads from the roots, making a dense turf which tends to crowd out weeds. Does well in shade and is good on sandy soil.

**BENT GRASS.** One of the most valuable lawn grasses. Exceptionally good for golf courses, greens, etc., because of its short growth and deep green, fine-leaved foliage. Requires very rich soil and plenty of moisture.

Mail Orders are Solicited and Prices Will be Quoted on Request.

Want a lawn  
that IS a lawn?



**Golf BRAND LAWN SEED**



## New .. Climate-Blend .. All Purpose

A blend of 11 perennial turf grasses—new Golf Brand is tailor-made for local growing conditions. Contains no rye grass or other short-lived fillers. Thrives in sun or shade, on slope or level. Seed treatment (with Du Pont fungicide) increases stands of grass 46%. **MAKES SEED GO FARTHER.**

Plant Golf Brand now—have a thick, velvety carpet of green this summer.

Fertilize with Golf Brand Turfood, 10-6-4 analysis. Prices on the above will be gladly quoted.





# FLOWER SEEDS

We are convinced that many of the failures with flower seeds are due to lack of proper conditions, and while it would be impossible in the space at our disposal in this catalog to give explicit directions for each and every variety which we offer, we feel sure that if the general directions given below are followed, success will be the rule.

All of our flower seeds are listed by their common name in strict alphabetical order, together with the botanical name for your guidance.

## Success With Flower Seeds

For all flower seeds which should be started indoors, the best plan is to sow in earthenware seed pans or boxes (about 2 inches deep) which should be filled to the depth of an inch with any rough material that will furnish perfect drainage. The upper inch should be nicely sifted soil, composed, if possible, of about one-third each of sand, leaf mould and light garden loam. Press firmly and evenly and water thoroughly the day before sowing. Sow the seeds thinly over the surface, cover about one-eighth of an inch and press firmly. When the seedlings are large enough to handle, they should be transplanted into similarly prepared boxes an inch apart each way, or put into small pots and kept in same until time to plant out in open ground. At all times they should have an abundance of air, otherwise the young seedlings are liable to "damp off."

For most of the ordinary annual flowers, the simplest method is to sow directly out-of-doors when danger of frost is past in the space where they are intended to flower. The ground should be dug and raked fine on the surface, sowing the seeds evenly and thinly, covering not over four times their size, and firming the soil over them. Should they come up too thickly, as most of them are likely to do, thin out so that the plants will stand from 4 to 12 inches apart, according to the variety.



Ageratum, Midget Blue

## How to Sow Flower Seeds

It will prove quite an advantage to mix all small seeds with sand or dry soil and scatter broadcast. This separates the seeds and is quite an advantage in thinning out or transplanting the young plants as those that remain are undisturbed. A common mistake in sowing flower seeds is covering too deeply. The exception to this is the Sweet Pea, which is seldom planted deep enough. As a general rule, cover small seeds only to the depth of the thickness of the seeds; always press the earth after sowing all flower seeds, else there is danger of their drying up before the roots can get firm hold of the soil. Seed of the hardier annuals may be sown where they are to grow; but as a rule, it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should be watered frequently.

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked.

**Annuals** are those flowers which bloom and die the same year; grown from seed exclusively.

**Biennials** bloom and die the second year from the seeding time.

**Perennials** grow the plant the first year but do not flower until the second year and then bloom every year.

**NUMBER OF SEEDS PER OUNCE UNDER ALL ITEMS ARE APPROXIMATE.**

**ABRONIA.**  
Pkt., 15c.

**Ageratum (A)**  
(FLOSSFLOWER)  
(214,000 seeds per oz.)

One of the best summer blooming plants. They are rapid growers; early and constant bloomers.

**MEXICANUM TALL.** 18 inches. Beautiful, soft lavender-blue, of free branching habit.  
Pkt., 10c; 1/4 oz., 30c.

**BLUE CAP.** Selected. 6 inches. Definitely more dwarf, more compact in habit with small leaves. Bright, deep, rich lavender-blue.

Pkt., 10c; 1/4 oz., \$1.20; 1 oz., \$3.50.

**BLUE BEDDER.** Dwarf.  
Pkt., 15c.

**MIDGET BLUE.** Dwarf, compact, rich blue.  
Pkt., 10c; 1/4 oz., \$1.50; oz., \$5.00.





Alyssum Saxatile Compactum (Perennial)

**Wilt-Resistant Asters (A)**

(12,000 seeds per oz.)

**GIANT CREGO.** The flowers are of immense size, usually from 4 to 5 inches in diameter, and borne on stems 12 inches or more in length. Mixed colors.

Pkt., 10c; ¼ oz., 35c; 1 oz., \$1.00; 4 ozs., \$2.50.

**QUEEN OF THE MARKET.** Best early Aster, usually in full bloom two weeks before most others begin to blossom. Graceful spreading habit. Mixed, all colors.

Pkt., 10c; ¼ oz., 35c; 1 oz., \$1.00; 4 ozs., \$2.50.

**AMERICAN BEAUTY.** Early flowering. Mixed colors.

Pkt., 10c; ¼ oz., 70c; 1 oz., \$2.00; 4 ozs., \$6.00.

**HEART OF FRANCE.** Dark ruby-red variety; large double flowers, beautiful type. Most outstanding Aster.

Pkt., 10c; ¼ oz., 70c; 1 oz., \$2.00; 4 ozs., \$6.00.



Baby's Breath



Calendula

**Alyssum (A)**

(SWEET ALYSSUM)

(60,000 seeds per oz.)

Very popular border flower. Dwarf habit, blooming until killed by frost. Fine for beds, borders and vases.

**LITTLE GEM.** Erect; white.

Pkt., 10c; ¼ oz., 25c; 1 oz., 75c; 4 ozs., \$2.00.

**VIOLET QUEEN.**

Pkt., 10c; ¼ oz., 35c; oz., \$1.15.

**CARPET OF SNOW**

Pkt., 10c. ¼ oz., 30c; 1 oz., 90c; 4 ozs., \$2.50.

**Alyssum (P)**

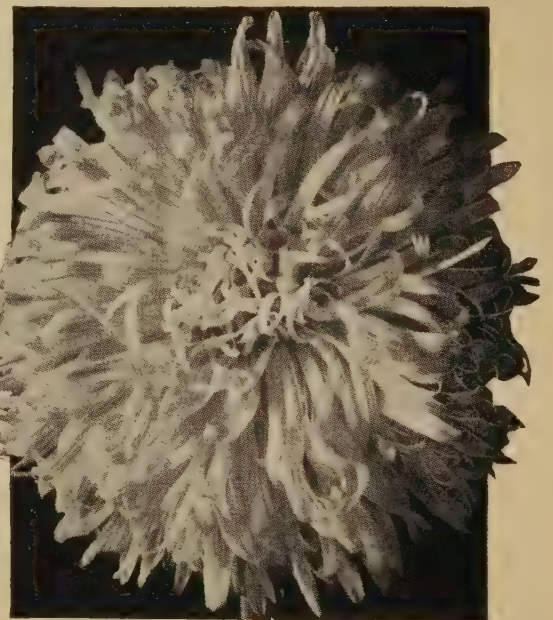
**SAXATILE COMPACTUM.** (Basket of Gold.) 9 inches high. Blooms in May and June, producing masses of golden flowers very early. Pkt., 10c; ¼ oz., 30c; 1 oz., 90c.

**ARCTOTIS.** Large Flowered Hybrids. Pkt., 25c.

**ANCHUSA ITALICA.** Dropmore. Pkt., 15c.

**ARABIS.** Alpina. Pkt., 10c.

**ARMERIA.** Formosa Hybrids. Pkt., 25c.



Giant Crego Asters

**GIANT CALIFORNIA SUNSHINE.** Flowers large, with loosely placed outer petals contrasting with creamy yellow or blue centers, giving a lazy effect which is quite delightful. The rogues and off types bloom first and the Giant Sunshine later. Mixed colors.

Pkt., 10c; ¼ oz., 60c.

**GIANT BRANCHING.** Mixed colors.

Pkt., 10c; ¼ oz., 35c; 1 oz., \$1.00; 4 ozs., \$2.50.

**DOUBLE AMERICAN BRANCHING.** Mixed.

Pkt., 10c.

**ACROCLINIUM.** Double Mixed. Pkt., 15c.

**Balsam (LADY SLIPPER) (A)**

(2,400 seeds per oz.)

**DOUBLE CAMELLIA-FLOWERED MIXED.** An old and favorite garden flower, producing its gorgeous masses of beautiful, colored, double flowers in the greatest profusion. 1½ to 2 feet.

Pkt., 10c; ¼ oz., 30c; 1 oz., 90c; 4 ozs., \$2.50.

**BUSH MIXED.**

Pkt., 10c; ¼ oz., 90c; 1 oz., \$2.75; 4 ozs., \$8.00.

**BLUE LACE FLOWER.** (A) Coeruleus. Blue. Pkt., 15c.

**Baby's Breath (GYPSOPHILA) (A)**

(25,000 seeds per oz.)

Graceful plants of fairy-like growth. Large flowering, pure white, of free, easy growth. Much in demand for cutting and combining with other flowers for bouquets and vases. Several sowings should be made during the season to keep up the supply.

Pkt., 10c; 1 oz., 35c; 4 ozs., \$1.00.

**GYPSOPHILA (P) Paniculata.** Double white.

Pkt., 10c; ¼ oz., \$1.00.





California Poppy

**Canterbury Bells** (CAMPANULA) (B)  
(125,000 seeds per oz.)

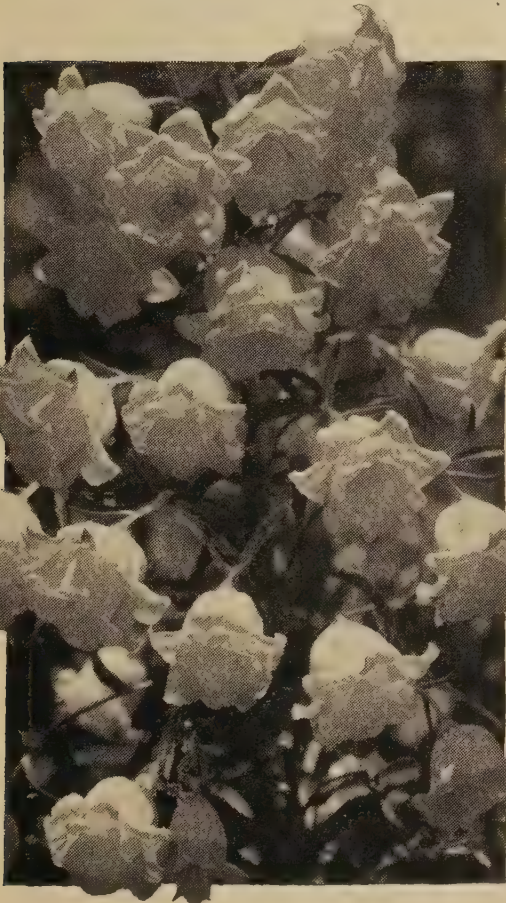
This old-fashioned flower is a favorite with all, stately and showy and of the easiest growth. For best results seed should be sown every year.

**SINGLE MIXED.**  
Pkt., 10c; 1/4 oz., 30c; oz., \$1.00.

**DOUBLE MIXED.**  
Pkt., 10c; 1/4 oz., 35c; oz., \$1.10.

**CALYCANTHEMA** (Cup and Saucer). 2 ft. June to August. Mixed colors.

Pkt., 10c; 1/4 oz., 50c; oz., \$1.40.



Canterbury Bells, Calycanthema

**Bachelor's Button** (CENTAUREA)

(8,000 seeds per oz.)

A very popular annual that will always charm by its simple beauty.  
**CYANUS MIXED.** Pkt., 10c; 1/4 oz., 15c; 1 oz., 50c; 4 ozs., \$1.50.  
**JUBILEE GEM.** Pkt., 10c.  
**RED BOY.** Pkt., 10c.

**Calendula** (POT MARIGOLD) (A)

(15,000 seeds per oz.)

**ORANGE KING.** The outer petals slightly imbricated, while those in the center are curved like those of the Peony. Color glowing orange.

Pkt., 10c; 1/4 oz., 15c; 1 oz., 50c; 4 ozs., \$1.50.

**THE BALL.** It has fine stems, immense double flowers of a brilliant glisteny orange. A great favorite on the Chicago cut flower market. Pkt., 10c; 1/4 oz., 15c; 1 oz., 50c; 4 ozs., \$1.50.

**SUNSHINE.** Pkt., 15c.

**California Poppy** (ESCHSCHOLTZIA) (A)

(15,000 seeds per oz.)

Valuable for growing in flower beds and masses. Sow where plants are to bloom. Bright showy flowers and feathered foliage. Good for cut flowers.

**CALIFORNIA MIXED.** Large flowers.

**CALIFORNIA GOLDEN.**

Pkt., 10c; oz., 50c.

**BUSH ESCHSCHOLTZIA.** See Hunnemannia, page 48.

**Calliopsis** (TICKSEED) (A)

(100,000 seeds per oz.)

Very graceful border plants, supplying throughout summer an abundance of elegant, showy flowers which are greatly prized for bouquets and vases. Will thrive anywhere. 6 in. to 2 ft. Double mixed, all colors.

Pkt., 10c; 1 oz., \$1.00.



Candytuft, Giant Hyacinth Flowered

**Candytuft** (A)

(10,000 seeds per oz.)

This is one of the most prized garden annuals. Easily grown from seed and does not need transplanting. Fine for cut flowers. Mixed.

Pkt., 10c; 1/4 oz., 20c; oz., 40c; 4 ozs., \$1.25.

**GIANT HYACINTH FLOWERED.** White. Pkt., 10c.

**CARDINAL CLIMBER** (A). Pkt., 15c.

**Carnations** (A)

(15,000 seeds per oz.)

Always in demand and not hard to grow, being hardy and free flowering. It is one of the most valuable of summer flowers.

**MARGUERITE.** Double Mixed.

Pkt., 10c; 1/4 oz., 75c; 1 oz., \$2.25; 4 ozs., \$6.50.

**CHABAUD GIANT MIXED.**

Pkt., 10c; 1/4 oz., \$1.10; 1 oz., \$3.25; 4 ozs., \$9.00.

**Castor Bean**

(RICINUS) (A)

(30 seeds per oz.)

Decorative plant with fernlike foliage, giving to the garden a magnificent sub-tropical effect; even a single plant forms a pyramid of leaves.

**ZANZIBARIENSIS.** Leaves vary in color from light green to purplish red.

Pkt., 10 seeds, 10c; 1 oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00.



Carnations



**Celosia (COXCOMB) (A)**

(30,000 seeds per oz.)

Very popular annuals of easy culture, producing large, ornamental, comblike heads like ruffled chenille. Prized for pots or summer flower beds.

**TALL COCKSCOMB MIXED.** 18 to 24 inches.

Pkt., 10c; 1/4 oz., 35c.

**CHINESE WOOLFLOWER.** (Celosia Childsi). Plants grow 2 to 3 ft. high, the bloom starting early with a central head, round and globular, which often reaches the immense size of 2 ft. in circumference. Scores of branches are thrown out, each bearing a ball of scarlet wool.

Pkt., 10c; 1/4 oz., 25c.

**PLUMOSA, DWARF FIERY FEATHERED.**

Pkt., 15c.

**FEATHERED, MIXED.**

Pkt., 15c.

**CHINESE FORGET-ME-NOT.** Firmament.

Pkt., 10c.



Celosia, Tall Coxcomb

**Chrysanthemum**

**CARINATUM RAINBOW MIXTURE.** A surprising blend of entirely new shades and color combinations in Annual Chrysanthemums. The very free flowering 2 feet high plants are early blooming, come into flower 2 months from the time of sowing; from June until September they give a truly amazing display.

Trade pkt., 30c; 1/4 oz., 60c; 1 oz., \$2.00, post-paid.

**CLARKIA.** Double Mixed.

Pkt., 15c.

**CLEOME.** Giant Pink Queen.

Pkt., 15c.



Coleus

**Coleus**

(FOLIAGE PLANTS) (A)

(3,500 seeds per 1/32 oz.)

Bedding plants, growing about 1 foot high. Their foliage is highly ornamental. Easy to raise from seed. Sow seed indoors. Extra large. Rainbow Mixture.

Tr. pkt., 75c; 1/32 oz., \$1.80; 1/16 oz., \$3.25.

**Columbine**

(AQUILEGIA) (P)

(17,500 seeds per oz.)

This beautiful plant thrives in all kinds of soil; graceful foliage, flowers abundantly from early May until the last of June. Mrs. Scott Elliott's Strain.

Pkt., 10c; 1/4 oz., \$1.25.



Columbine — Aquilegia



Coreopsis

**Coreopsis (P)**

(12,000 seeds per oz.)

This is one of the finest of hardy plants, with large, showy, bright yellow flowers produced in the greatest abundance from June until frost. As cut flowers they stand near the head among hardy plants.

Pkt., 10c; 1/4 oz., 20c; oz., 60c.

**Cypress Vine (A)**

For trailing upon a light ornamental trellis the Cypress Vine cannot be excelled. It has a profusion of scarlet or white star-shaped blossoms, and finely cut foliage.

Pkt., 15c; 1/4 oz., 35c.



**Cosmos (A)**

(5,500 seeds per oz.)

**KLONDYKE, ORANGE FLARE.** Orange Flare will flower in the North in less than four months from seed and continue to grow and bloom with increasing freedom until killed by frost. As it is a tropical plant it should not be sown out-of-doors until the ground is warm. Give it full sun in the garden. Cut flowers should be taken when newly opened with low centers when they will keep several days in water. Pkt., 10c; ¼ oz., 20c; 1 oz., 60c.

**EARLY FLOWERING MAMMOTH, MIXED.**  
Pkt., 10c; oz., 60c; 4 ozs., \$1.75.

**SENSATION MIXED.** The most satisfactory class of Cosmos to grow for cut-flower purposes. Extra large-flowered, extra early.  
Pkt., 10c; 1 oz., 75c.



Cosmos, Sensation

**DAHLIA**

**UNWIN'S DWARF HYBRIDS.** ¼ oz., 75c; 1 oz., \$2.50; 4 ozs., \$7.50.



Delphinium

**Double Daisy**

(BELLIS PERENNIS) (P)

(12,500 seeds per oz.)

A favorite low growing spring flowering plant. Loves a shady place and rich soil. 6-8 in. Double choice mixture. Pkt., 10c; ⅛ oz., 65c; ¼ oz., \$1.20; 1 oz., \$3.50.

**PAINTED DAISY.** See Pyrethrum, page 49.

**Delphinium**

(PERENNIAL LARKSPUR) (P)

(10,000 seeds per oz.)

**PACIFIC GIANTS, MIXED.** This new strain produces plants that are 60-65 per cent mildew resistant. The flowers are immense size, tightly set on straight stems. The flowers do not shatter and are fine for cut flowers.

Pkt., 15c.

**Forget-Me-Not**

(MYOSOTIS) (B)

(42,000 seeds per oz.)

They are considered among the best spring flowers. They prefer moist, cool soil, and will bloom freely in fall and early spring.

**VICTORIA.** Sky-blue.

**VICTORIA, ROSEA.** Pink.

Pkt., 10c; ¼ oz., 80c; 1 oz., \$2.50.

**Four O'clock**

(MIRABILIS) (A)

(350 seeds per oz.)

**MARVEL OF PERU.** Mixed colors.  
Pkt., 10c; oz., 40c; ¼ lb., \$1.25.

**Foxglove**

(DIGITALIS) (B)

(200,000 seeds per oz.)

Bearing long spikes of beautifully colored flowers; fine for planting in hardy borders or among shrubbery. Mixed.

Pkt., 10c; ¼ oz., 30c; oz., 80c.



Four O'clock

**Gladiolus**

Our "Grand River Collection" of Gladiolus is fully listed on the outside back cover. For all the others see pages 34 and 35.

"A thing of beauty is a joy forever."



**Gaillardia**

(BLANKET FLOWER) (A)

(15,000 seeds per oz.)

**PICTA LORENZIANA.** Double flowers, mixed colors.  
Pkt., 10c; ¼ oz., 30c.**Gaillardia (P)**

Bloom from June to October. Their long flowering period, long stems and bright colors make these one of the most valuable perennials, being easily grown in beds and borders.

**GRANDIFLORA.** Mixed single. Pkt., 10c; ¼ oz., 30c.**GEUM.** Double Scarlet. Pkt., 20c.**GOURDS, Large and Small Fruited.** Mixed. Pkt., 15c; oz., 30c.**HELIOTROPE.** Dark varieties mixed. Pkt., 25c.**HESPERIS.** Purple or white. Pkt., 15c.**HIBISCUS.** Pkt., 15c.**Hollyhocks (P)**

(3,800 seeds per oz.)

Make a fine row in the garden and an excellent background to cover a high wall or fence. 6 to 8 ft.

**DOUBLE MIXED.** Double and semi-double.

Pkt., 10c; ¼ oz., 40c.

**HOLLYHOCK.** Indian Spring. Pkt., 15c.**HUNNEMANNIA.** Pkt., 15c.**ICELAND POPPY.** Gartford Mixed. Pkt., 20c.**KOCHIA.** Childsi. Pkt., 15c.**LANTANA.** Pkt., 15c.**Larkspur (A)**

(8,700 seeds per oz.)

The graceful spikes of blooms are much valued for vases. They continue long in bloom.

**DOUBLE MIXED.** All colors.

Pkt., 10c; ¼ oz., 25c; 1 oz., 70c; 4 ozs., \$2.00.

**GIANT IMPERIAL MIXED.** 3 feet. Derives its name from the striking resemblance of the flowers to the Double Hyacinth. Delicate color.

Pkt., 10c; ¼ oz., 30c; 1 oz., 85c; 4 ozs., \$2.50.

**BRILLIANT ROSE.** Pkt., 10c.**SUPER MAJESTIC MIXED.** Pkt., 15c.**BLUE SPIRE.** Pkt., 10c.**MAJESTIC ROSE.** Pkt., 15c.**LAVENDER.** Pkt., 25c.**LOBELIA.** Crystal Palace. Pkt., 25c.**LUNARIA.** Biennis. Pkt., 25c.**LUPIN.** Perennial Mixed. Pkt., 20c.

Double Hollyhock



Gaillardia

**Marigold (TAGETES) (A)**

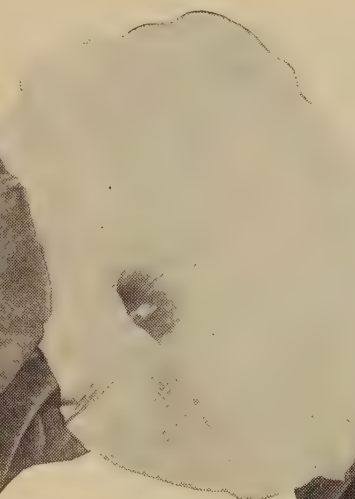
(10,000 seeds per oz.)

**TALL AFRICAN DOUBLE.****GUINEA GOLD.** 2 to 2½ feet. An unusual type of Marigold, color orange flushed with gold. Nearly all flowers are double or semi-double and their odor is less pungent than that of other Marigolds. Pkt., 10c; ¼ oz., 55c; 1 oz., \$1.80; 4 ozs., \$5.00.**YELLOW SUPREME.** A large, fluffy, well-rounded bloom of delicate milk-honey fragrance, with broad, loose frilled petals of a rich, creamy lemon color. Plants practically free from objectionable Marigold odor. Pkt., 10c; ¼ oz., 55c; 1 oz., \$1.80; 4 ozs., \$5.00.**SUNSET GIANTS.** Huge flowers; colors range through orange, yellow and primrose. A tall variety and a beauty. Pkt., 10c; ¼ oz., 55c; 1 oz., \$2.00; 4 ozs., \$6.00.**ORANGE SUPREME.** Flowers 4 to 5 inches, attractive all double orange flowers borne on long stiff stems. Plant 2½ to 3 ft. tall. ¼ oz., 55c; 1 oz., \$1.80.**DOUBLE TALL AFRICAN MIXTURE.** Pkt., 10c; ¼ oz., 55c; 1 oz., \$2.00; 4 ozs., \$6.00.**SINGLE DWARF FRENCH.****FLASH.** Single mahogany flowers with golden yellow margins on medium dwarf plants. Pkt., 10c; ¼ oz., 65c; 1 oz., \$2.00; 4 ozs., \$6.00.**NAUGHTY MARIETTA.** Uniform, semi-dwarf, bushy plants, vigorous, free blooming with 2-inch flowers of golden yellow, each petal having a mahogany base. Pkt., 10c; ¼ oz., 55c; 1 oz., \$2.00.**RED HEAD.** Flowers 2 inches across, opening rich mahogany, changing to auburn and later to bronzy gold. Compact dwarf plants, 1 ft. high, completely covered with flowers. ¼ oz., 55c; 1 oz., \$2.00.**DOUBLE DWARF FRENCH.****SPRY.** Very light orange crested center, maroon outer petals. Plant 9 inches. ¼ oz., 55c; 1 oz., \$2.00; 4 ozs., \$6.00.**BUTTERBALL.** Soft butter-yellow, 6 to 8 inches. ¼ oz., 55c; 1 oz., \$2.00; 4 ozs., \$6.00.**SUNKIST.** Orange, dwarf, compact, early. ¼ oz., 55c; 1 oz., \$2.00; 4 ozs., \$6.00.**YELLOW PYGMY.** Light lemon-yellow, only 8 inches tall and compact small 1¼-inch blooms, free flowering and excellent for edging beds. ¼ oz., 55c; 1 oz., \$1.80; 4 ozs., \$5.00.**HARMONY.** 12 to 14 inch. Scabious-like flowers of deep orange with maroon collars of broad petals, crested centers. ¼ oz., 35c; 1 oz., \$1.10; 4 ozs., \$3.75.**EXTRA DWARF HARMONY.** Same color as Spry, but dwarf in habit. 6 inches. ¼ oz., 55c; 1 oz., \$2.00; 4 ozs., \$6.00.**COLOR MAGIC.** (New.) Brilliant colors red to pure gold, many varied striped combination in red and gold. Full double. Plant dwarf and compact. 6 inches. ¼ oz., 90c; 1 oz., \$2.80.**CUPID MIXED.** (New.) Dwarf in habit. 6 inches. Large, chrysanthemum-like flowers completely cover the entire plant. Orange, yellow and golden yellow. Odorless, flowers 2 to 2½ inches across. ⅛ oz., 70c; ¼ oz., \$1.25; 1 oz., \$4.25.**Special Mixture of new varieties of Dwarf French, including Spry, Butterball, and Sunkist, etc., ¼ oz., 55c; 1 oz., \$2.00; 4 ozs., \$6.00.**

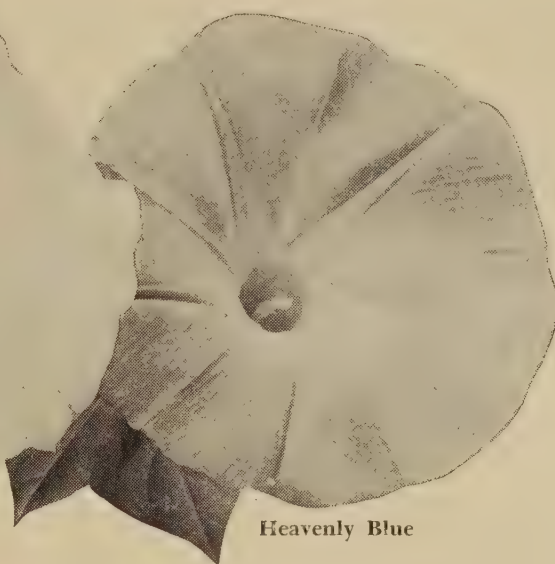




Scarlett O'Hara



Pearly Gates



Heavenly Blue

**Mignonette (A)**

(30,000 seeds per oz.)

**MACHET.** The best for all purposes. Of dwarf habit, with very large red flowers and handsome foliage.

Pkt., 10c.

**MOMORDICA.** Mixed.  
Pkt., 15c.**Morning Glory (IPOMOEAE) (A)**

(200 seeds per oz.)

Deservedly very popular as they are one of the most free flowering and rapid growing plants in cultivation; the beauty and delicacy of their brilliant flowers are unsurpassed. Soaking the seed in warm water for an hour or two hastens germination.

**COMMON, MIXED.**

Pkt., 10c; oz., 25c.

**ORIENTAL, MIXED.**

Pkt., 15c; oz., \$1.20.

**HEAVENLY BLUE.**

Pkt., 10c; oz., 60c.

**SCARLETT O'HARA.**

Pkt., 15c; oz., 75c.

**PEARLY GATES.**

Pkt., 15c; oz., 75c.

**GIANT CORNELL.** Red with white edge. The best red large flowered Morning Glory.

Pkt., 15c; oz., \$1.00.

**CRIMSON RAMBLER.**

Pkt., 10c.

**Nasturtiums (A)**

For ease of culture, duration of bloom, brilliancy of coloring and general excellence, nothing excels them. All they need is a moderately good soil, in a well drained sunny position, and within a few weeks from the time they are sown until hard frost comes there is an endless profusion of blossoms.

**DWARF, MIXED.**

Pkt., 10c; 1 oz., 20c; 4 ozs., 60c.

**TALL, MIXED.**

Pkt., 10c; 1 oz., 20c; 4 ozs., 60c.

**SCARLET GLEAM.** Plain petaled and deep throated. This is a sweet scented variety similar to Golden Gleam.

Pkt., 10c; 1 oz., 20c; 4 ozs., 60c.

**GOLDEN GLEAM.** An attractive, double-flowered, sweet-scented variety adapted to culture as bedding or pot plants. Also valuable for cut flowers.

Pkt., 10c; 1 oz., 20c; 4 ozs., 60c.

**DOUBLE GLORIOUS GLEAM HYBRIDS.** These hybrids are a collection of gorgeously colored, large, well formed flowers of such dazzling beauty and colors as were never dreamed of before in a double Nasturtium. Mixed colors.

Pkt., 10c; 1 oz., 20c; 4 ozs., 60c.

**NEMESIA.** Triumph Mixed.

Pkt., 15c.

**NICOTIANA.** Evening Star.

Pkt., 10c.

**OENOTHERA.** Primrose.

Pkt., 15c.

**Pyrethrum**

(PAINTED DAISY) (P)

One of the most valuable of our early summer flowers. Charming colors and wonderful lasting properties as a cut flower. Flowers in May and June and frequently in August and September; in all shades of rose and pink. Height 1 to 2 feet.

**ROSEUM.** Single mixed.

Pkt., 25c; 1/4 oz., \$2.25; 1 oz., \$6.50.



Golden Gleam Nasturtium



## Petunias (A)

(250,000 seeds per oz.)

The Petunia loves a rich soil and thrives best in a sunny location. Pinch back freely. This causes the plants to branch out and spread, shading the ground, thereby helping to conserve the moisture. Keep the faded flowers clipped.

### PETUNIA Giants of California

The flowers are very large, averaging 5 to 7 inches across, and the colors embrace every conceivable shade of crimson, white, violet, lavender, etc.

#### 5708 SUPER DWARFS EXTRA CHOICE BLEND.

Pkt., 50c; 1/16 oz., \$6.00; 1/8 oz., \$11.00; 1/4 oz., \$20.00.

#### 5704 MIXED. Light and dark shades.

Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.00; 1/4 oz., \$15.00.

### PETUNIA, Hybrid

Strong growing and free flowering 20- to 24-inch plants, bearing many medium sized plain edged single flowers. For garden use.

#### 5432 FLAMING VELVET. Velvety blood-red.

Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.

#### 5422 HOWARD STAR. Reddish purple, white star.

Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.

#### 5438 TOPAZ ROSE. Rose and gold. All-America '38.

Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.

#### 5430 VIOLACEA. Deep violet.

Pkt., 15c; 1/8 oz., 45c; 1/4 oz., 85c; 1 oz., \$2.50.

#### 5410 WHITE KING. White.

Pkt., 15c; 1/8 oz., 45c; 1/4 oz., 85c; 1 oz., \$2.50.

#### 5440 SPECIAL MIXTURE.

Pkt., 15c; 1/8 oz., 40c; 1/4 oz., 70c; 1 oz., \$2.00.

### PETUNIA, Hybrid, Nana Compacta

Dwarf compact free flowering 12- to 14-inch plants, bearing many medium sized plain-edged single flowers. For beds and borders.

#### 5482 BLUE BEDDER. Mid-blue.

Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.

#### 5484 CELESTIAL ROSE. Deep rose, compact.

Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.

#### 5302 CREAM STAR. Soft creamy white flowers.

Pkt., 25c; trade pkt., 60c; 1/8 oz., \$1.25; 1/4 oz., \$2.00; oz., \$6.00, if available.

#### GLOW. Of dwarf bushy habit, flowers dazzling carmine-red.

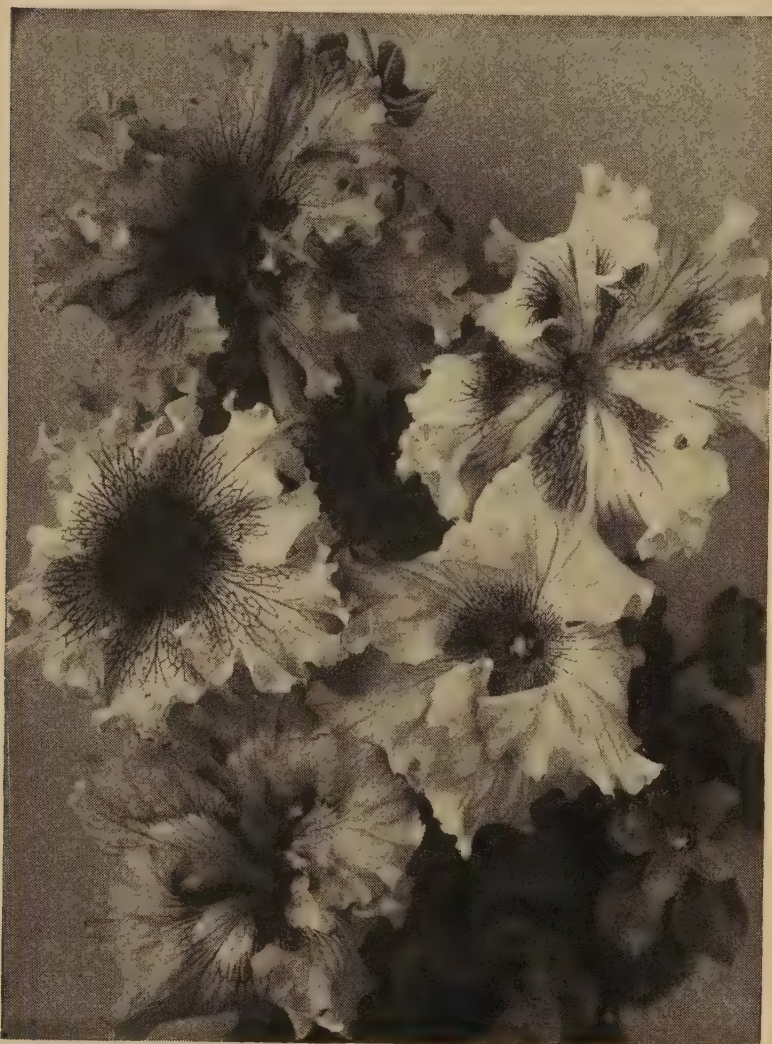
Pkt., 40c; 1/16 oz., \$1.40; 1/8 oz., \$2.20.

#### 5500 ROSY MORN. Select rose, white throat, dwarf extra select stock.

Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.

#### 5492 FIRE CHIEF. Gold Medal All-America 1950. Brilliant scarlet-red. Plants dwarf, compact, long blooming season.

Pkt., 35c; 1/8 oz., \$1.75; 1/4 oz., \$3.25; 1 oz., \$12.50.



Petunias, Giants of California

In ordering Petunias, be sure to order by number as well as by name, to insure giving you the varieties you want.



Cream Star



## PETUNIAS

### CANADIAN ALL DOUBLE LARGE FLOWERING

All Double Formula Mixture. A blend made of the various All Double Mixtures now available, to which have been added separate colors in the right proportion.

1/2 trade pkt., \$2.25; trade pkt., \$4.00; 1/128 oz., \$7.25; 1/64 oz., \$13.50; 1/32 oz., \$26.00.

**COLOSSAL SHADES OF ROSE IMPROVED.** Giant double blooms up to 5 inches or more across on vigorous compact plants. Containing 80% rose and new salmon shades. Makes fine 4- to 5-inch pot plants for Easter, Mother's Day and spring combinations. 500 seeds \$1.65; 1000 seeds \$2.75; 1/128 oz., \$5.50; 1/64 oz., \$10.00.

- 5496 **ROSE OF HEAVEN.** Brilliant rose dwarf, extra select stock. Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.  
 5516 **SNOW QUEEN.** Large flowers, white. Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.  
 5510 **TOPAZ QUEEN.** Scarlet-rose, compact, large. Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.  
 5303 **TWINKLES.** Masses of small bright rose flowers with white star. Pkt., 15c; 1/8 oz., 80c; 1/4 oz., \$1.50; 1 oz., \$4.50.  
 5512 **VIOLACEA.** Deep velvety purple. Pkt., 15c; 1/8 oz., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00.

### Special Mixture of Dwarf Small Flowering Varieties

Includes all the varieties listed above and many others, and will be a revelation to those who plant a packet in furnishing an unending supply of flowers in a most bewildering combination of colors as long as summer lasts.

Pkt., 10c; 1/8 oz., 60c; 1/4 oz., \$1.00; 1 oz., \$3.75.

### Grandiflora Nana Compacta

- 5446 **KING HENRY.** Velvety red. Large flowers, 8-inch plants. Pkt., 25c; 1/16 oz., \$2.25; 1/8 oz., \$4.00; 1/4 oz., \$7.00.

### Balcony (Hybrid Pendula)

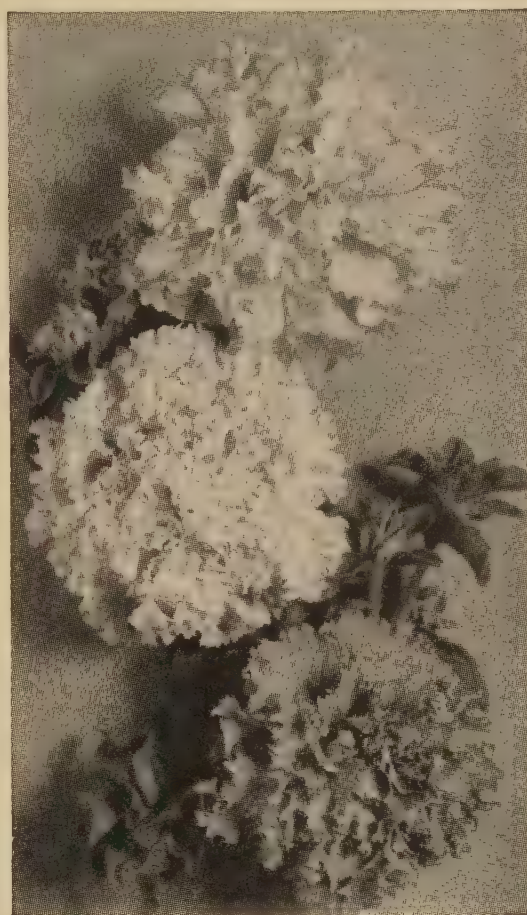
Strong growing 18- to 24-inch plants with spreading or trailing foliage bearing many single plain edged flowers larger than the ordinary bedding types. For garden, window boxes or pots.

- 5544 **BLACK PRINCE.** Deep velvety red. Pkt., 25c; 1/8 oz., \$1.00; 1/4 oz., \$1.85; 1 oz., \$6.75.  
 5536 **BALCONY RED.** (Red Prince.) Crimson. Pkt., 15c; 1/8 oz., 80c; 1/4 oz., \$1.50; 1 oz., \$4.50.  
 5532 **BALCONY BLUE.** Deep violet-blue. Pkt., 15c; 1/8 oz., 80c; 1/4 oz., \$1.50; 1 oz., \$4.50.  
 5538 **BALCONY ROSE.** Vivid rosy pink. Pkt., 15c; 1/8 oz., 80c; 1/4 oz., \$1.50; 1 oz., \$4.50.  
 5558 **BALCONY MIXED.** Several colors. Pkt., 15c; 1/8 oz., 65c; 1/4 oz., \$1.20; 1 oz., \$3.50.

### Large Fringed Types

#### Grandiflora Single Fringed

- 5624 **FLUFFY RUFFLES.** Mixture of bi-color shades, many of which are not offered in separate colors. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.  
 5618 **FRINGED SNOWSTORM.** Excellent white, compact. Pkt., 75c; 1/16 oz., \$6.00; 1/8 oz., \$10.00; 1/4 oz., \$18.00.  
 5598 **THEODOSIA.** Fringed rose, gold throat. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.  
 5602 **VIOLACEA MARINE.** Deep velvety violet. Pkt., 75c; 1/16 oz., \$7.00; 1/8 oz., \$12.50; 1/4 oz., \$20.00.  
 5626 **FIMBRIATA.** Choice mixed. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.



Double Petunias

### Large Plain Edged Types

#### Grandiflora Single Plain Edged

Of free flowering 12- to 16-inch plants, some varieties spreading, others compact. Many plain edged flowers of heavy substance and velvety texture. Prime favorite of florists.

- 5644 **DAZZLER.** New brilliant scarlet, compact. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.  
 5636 **ELK'S PRIDE.** Darkest velvety purple. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.  
 5642 **PINK GLORY.** Improved, deep rose, white throat, compact. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.  
 5662 **SNOWSTORM IMPROVED.** Best florist white, yellow shaded throat. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.  
 5652 **WHITE CLOUD.** Pure white, compact. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.  
 5668 **SPECIAL MIXTURE.** Light and dark shades. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.  
 5734 **ROYALTY.** Rich purple with white star. Pkt., 50c; 1/16 oz., \$4.50; 1/8 oz., \$8.50; 1/4 oz., \$15.00.

In ordering Petunias, be sure to order by number as well as by name, to insure giving you the varieties you want.

- SILVER (HEAVENLY) BLUE.** Pkt., 20c.  
**GIANT RUFFLED and FRINGED.** Pkt., 50c.  
**ROSE KING IMPROVED.** Pkt., 15c.  
**CREAM STAR, DWARF.** Pkt., 20c.  
**ROSE BEDDER, DWARF.** Pkt., 15c.  
**MIDGET, MIXED.** Pkt., 20c.



**Pinks (DIANTHUS) (A)**

(28,000 seeds per oz.)

**DOUBLE.** Selection of the best double Pinks in cultivation. Flowers ranging in color through all the brightest and most brilliant shades.

**Pkt., 10c; 1/4 oz., 25c; oz., 75c.**

**ALLWOODI.** (P). 1 1/2-inch, single flowers in shades of pink.

**Pkt., 10c; 1/4 oz., \$1.50.**

**Phlox (A)**

(18,000 seeds per oz.)

The annual Phloxes are dazzling in effect, particularly so when sown in masses or ribbon beds of contrasting colors. Few flowers are so easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost or care.

**PHLOX DRUMMONDI.** Unsurpassed for variety of colors. Mixed.

**Pkt., 10c; 1/4 oz., 60c; oz., \$1.75.**

**SCARLET, LARGE FLOWERING.**

**Pkt., 25c.**

**PHLOX DECUSSATA.** (Perennial.)

**Pkt., 10c; 1/4 oz., \$1.00.**



Phlox Drummondii

**Pansies**

(12,000 seeds per oz.)

They like a cool, moist soil and protection from the wind as well as the noon-day sun. Seed should be sown in the house and transplanted when danger of frost is over. For large flowers, early in the spring, the seed should be sown in August or September and the plants protected with a cold frame during the winter. May also be sown out-of-doors in the spring for late summer and fall flowers.

**SUPER SWISS GIANTS.** This mixture combines the finest selections of several Pansy specialists, the perfect blending is further insured by the addition of separate colors that do not generally appear in the average mixtures.

**1/8 oz., \$2.00; 1/4 oz., \$3.30; oz., \$11.00; 4 ozs., \$40.00.**

**SUPER MAPLE LEAF MIXTURES "CANADIAN GIANTS."** A selection of the distinct variety Maple Leaf Giants, having large leaves of a rich dark green and flowers of gigantic size and heavy substance, with good stems, in a beautiful color range. Plants of compact and sturdy growth.

**1/8 oz., \$1.90; 1/4 oz., \$3.40; 1 oz., \$11.00.**

**PRIMROSE.** Showy Evening.

**Pkt., 15c.**

**PRIMULA.** Malacoides, New Baby.

**Pkt., 50c.**

**RANUNCULUS.**

**Pkt., 25c.**



Garden Pinks

**Oriental Poppies (P)**

(448,000 seeds per oz.)

These should be sown in early spring in the open ground as soon as it is fit to work. The plants disappear during July and August appearing again as soon as the weather gets cool. It is well to mark the place with a stick so the roots will not be disturbed during the resting period. When the fall growth starts they should be transplanted to their permanent flowering quarters. Flowers of immense size, 6 inches and over, of many novel colors.

**NEW MIXTURE.**

**Pkt., 10c; 1/4 oz., \$1.15.**

**PRIMULA, New Baby.**

**Pkt., 50c.**



Oriental Poppies

Pansies





**Poppies**

(73,000 seeds per oz.)

Should be sown as early in the spring as possible, where they are to remain, as they will not stand transplanting. Sow very thinly; they must not stand nearer than 5 or 6 inches apart if you wish best results.

**SHIRLEY, SINGLE.** Lovely and dainty shades, many edged and shaded with other colors.

Pkt., 10c; ¼ oz., 15c; oz., 50c.

**SHIRLEY, DOUBLE.** Beautiful double satiny flowers in shades of white, pink and old rose with white centers.

Pkt., 10c; ¼ oz., 15c; oz., 50c.

**DOUBLE SHIRLEY, SWEET BRIAR.**

Pkt., 10c.

**AMERICAN LEGION.**

Pkt., 10c.



Shirley Poppies

**Portulaca (ROSE MOSS) (A)**

(300,000 seeds per oz.)

This plant will grow and bloom profusely in dry, hot situations, where almost any other plant would soon die. Easily transplanted. In sowing mix the seed with dry sand to insure an even distribution. Sow in May when the ground is thoroughly warmed, and soon the loveliest of floral carpets will appear.

**BEST DOUBLE MIXTURE.**

Pkt., 10c; ¼ oz., \$1.50; oz., \$4.25.

**SINGLE MIXED.**

Pkt., 10c; ¼ oz., 45c; oz., \$1.25.



Portulaca

**Salpiglossis (A)**

(125,000 seeds per oz.)

Undoubtedly one of the most attractive annuals and should be in every garden. The blossoms are tube-shaped, much like Petunia but rivaling the latter in the beautiful colors displayed. Nearly every flower is veined with a glint of gold. Flowers are large and last well in water, really better than on the plants.

Large Flowering Mixed.

Pkt., 10c; ¼ oz., 30c; oz., 90c.

**Scarlet Runner (A)**

(30 seeds per oz.)

A very rapid grower, bearing sprays of bright scarlet, pealike flowers from early summer to late fall.

Pkt., 10c; oz., 20c; ¼ lb., 50c.

**Shasta Daisy (P)**

(CHRYSANTHEMUM LEUCANTHEMUM)

(18,000 seeds per oz.)

Grows very bushy, bearing all summer a profusion of immense white flowers on long stems.

Pkt., 10c; ¼ oz., 30c; oz., 90c.

**Salvia (FLOWERING SAGE) (A)**

(7,500 seeds per oz.)

A hedge or bed of Salvias is a blaze of color during late summer and fall, bloom in spikes and continuing to bloom until killed by hard frosts. Seed should be started indoors, sow about ¼ inch deep; transplant when soil is well warmed, about 12 to 18 inches apart.

**SALVIA SPLENDENS.** About 2 to 2½ ft. tall. The standard late tall scarlet.

Pkt., 10c; ¼ oz., \$1.25; oz., \$4.00; 4 ozs., \$13.00.

**BONFIRE.** About 16 inches tall, compact, early.

Pkt., 10c; ¼ oz., \$1.50; oz., \$4.50; 4 ozs., \$15.00.

**AMERICA.** (Globe of Fire.) 18 inches tall. Early dwarf.

Pkt., 10c; ¼ oz., \$1.50; oz., \$4.50; 4 ozs., \$15.00.

**BLAZE OF FIRE.** 12 inch. Bright scarlet. Earliest of all.

Pkt., 10c; ¼ oz., \$2.00; 1 oz., \$6.00.

**ST. JOHN'S FIRE.** 10 inch. Extra early bright scarlet, uniform and compact. An excellent strain.

Tr, pkt., 75c; ¼ oz., \$2.50; ½ oz., \$4.25; 1 oz., \$7.50.

**FARINACEA.** Blue bedder. Deep blue. 3 ft. tall.

¼ oz., \$1.00; 1 oz., \$3.50.



Salvia, Fireball



**Scabiosa (A)**(Mourning Bride)  
(3,500 seeds per oz.)**GRANDIFLORA MIXED.** Our latest special mixture and we are sure the delicate soft colors will be admired by all our friends.**Pkt., 10c; 1/4 oz., 20c; oz., 60c; 4 ozs., \$2.00.****BLUE MOON. Pkt., 15c.****CAUCASICA.** Lavender-blue.  
**Pkt., 50c.****SCHIZANTHUS, Dr. Badger. Pkt., 25c.****SENSITIVE PLANT. Pkt., 15c.**

Snapdragon

**Stocks (A)**

(19,000 seeds per oz.)

**TEN WEEKS LARGE FLOWERING.** The favorite sort for bedding. Grows about 1 ft. high. **Mixed, all colors.****Pkt., 10c; 1/4 oz., 60c; 1 oz., \$1.85; 4 ozs., \$4.00.****MAMMOTH DOUBLE EARLY BRANCHING NICE.**

Just as early as the Dwarf Ten Weeks variety, forming plants pyramidal in shape. Height 18 inches.

**Pkt., 10c; 1/4 oz., 50c; 1 oz., \$1.75.****GIANT IMPERIAL CRIMSON. Pkt., 15c.****GIANT IMPERIAL PURPLE. Pkt., 15c.****GIANT IMPERIAL ROSE. Pkt., 15c.****GIANT IMPERIAL GOLDEN ROSE. Pkt., 15c.****Strawflower (A)**

(HELICHRYSUM)

(45,000 seeds per oz.)

An ornament to the garden when growing, and are prized everywhere for the winter decoration of vases, and for durable bouquets. Flowers intended for drying should be gathered when partially unfolded and suspended with their heads downward in a cool place.

**MIXED, ALL COLORS. Pkt., 10c; 1/4 oz., 40c; 1 oz., \$1.20; 4 ozs., \$3.50.****SWEET SULTAN. Mixed. Pkt., 10c.****Rust-Proof Snapdragon**

(ANTIRRHINUM)

(220,000 seeds per oz.)

For gorgeous coloring few flowers can match Snapdragons. The flowers are of very large size, very fragrant, and are produced on immense long spikes, which render them well adapted for cut flowers. These strains are the finest obtainable.

**SUPER MAJESTIC.** Half dwarf mixed. An exceptionally good variety for plant sales and bedding work to which we have added "Royal Crimson" for the darker shades. 16-20 inches.**1/4 oz., 75c; 1 oz., \$2.25; 4 ozs., \$6.75.****LARGE FLOWERING.** Tall. 2 1/2 ft. Majus Grandiflorum, University of California De Luxe Mixture. "Cherry Rose" is a most brilliant shade of deep cherry-rose and "Padre" a glistening crimson have been added to the mixture for darker shades.**1/4 oz., 60c; 1 oz., \$1.85; 4 ozs., \$8.50.****COLOSSAL STRAIN.** (Colossal Snapdragons.) Finest mixed. The tremendous vigor that produces strong 3-ft. stems filled with very large florets even under adverse conditions "Velvet Giant," a deep velvet-red and "Crimson," a fiery crimson have been added to the mixture for darker shades. All colors blended.**1/4 oz., \$1.25; 1 oz., \$4.00; 4 ozs., \$14.00.****TETRAPLOID SUPERFINE MIXTURE.** (Tetra Snap.) The most satisfactory outdoor Snapdragon offered today. Plants tall, husky and erect, with huge ruffled florets and long spikes. The outstanding variety for plant growers.**Pkt., 10c; 1/8 oz., 65c; 1/4 oz., \$1.20; 1 oz., \$3.50.****GIANT BEDDING WHITE. R. R. Pkt., 25c.****GIANT BEDDING PINK. R. R. Pkt., 25c.****GIANT BEDDING YELLOW. R. R. Pkt., 25c.****GIANT BEDDING MIXED. R. R. Pkt., 15c.****Sunflower (HELIANTHUS) (A)**

(700 seeds per oz.)

Of easiest culture. Suitable for backgrounds, screens, and to plant among shrubbery. It blooms from June till frost, 3 to 6 feet.

**DOUBLE CHRYSANTHEMUM-FLOWERED. Large,**

golden yellow flowers, resembling a Chrysanthemum.

**Pkt., 10c; oz., 40c.****RED and GOLD. Pkt., 20c.****SNOW-ON-THE-MOUNTAIN. Pkt., 15c.****STATICE. Mixed.****Pkt., 15c.****Sweet William (P)**

(31,000 seeds per oz.)

This sturdy, reliable, old-fashioned favorite is still a source of delight in the garden of today. Seed may be sown at any time from spring to midsummer. The charm of the great trusses of lovely color seems to be lost when it is planted as a mixture in masses. It is best if you give slight protection during the winter. It likes warm, rich soil. 2 feet.

**SINGLE, FINEST MIXED.** A very choice assortment of all the best single flowered varieties.**Pkt., 10c; 1/4 oz., 30c; oz., 85c; 4 ozs., \$2.50.****DOUBLE MIXED.** This mixture you will find of superior quality, containing all colors and shades.**Pkt., 10c; 1/4 oz., 40c; 1 oz., \$1.20; 4 ozs., \$3.50.****SINGLE EARLY FLOWERING.** Dwarf Midget Mixed. 6 inches. A dwarf variety ideally adapted for early flowering, and for the perennial border as well as pot plants.**Pkt., 10c; 1/4 oz., \$1.50; 1 oz., \$4.50.****SWEET WIVELSFIELD.****Pkt., 15c.**

Sweet William





## Beautiful Sweet Peas

(340 seeds per oz.)

To grow Sweet Peas successfully it is necessary to plant EARLY and give plenty of moisture. They should go in the ground as soon as the ground can be worked and should be planted six inches deep, being covered at first with only two inches of soil, the trench being filled as the plants grow. It is best to soak the seed for several hours before they are planted. If this plan of planting early is followed, and if the Sweet Peas are kept mulched with peat moss, lawn clippings or else watered abundantly, they will certainly give a fine crop of lovely flowers held in admiration by every flower lover. The mixture we give you below will give you color in profusion and is well worth your consideration.

### Cuthbertson Mixed

Spring Flowering

A great many people prefer to grow Sweet Peas in the mixed colors. Our superb Cuthbertson Mixture is made up of all the best varieties obtainable. The greatest care is taken to insure a well balanced range of colors and worthy of a place in any garden.

**Pkt., 10c; oz., 25c; 1/4 lb., 65c; 1 lb., \$2.00.**

The Cuthbertson, which we are offering instead of the Spencers, is a new type of Sweet Pea characterized by its excellent heat resistance. Comes into bloom midway between the early and late Spencers, and continues much longer, even in hot weather, when most Spencer varieties fade. The flowers are plainer than the Spencer type, but large with good stems. Results to date indicate that it is preferable in most localities.

### Cuthbertson In Separate Colors

We give you below the best of the Cuthbertson varieties in a range of individual colors for those who want to work out a color scheme. Each one is a rare beauty and worthy of a place in your garden.

**DANNY.** Blue.  
**DAVID.** Rose-crimson.  
**EVELYN.** Cream-pink.  
**RUTH.** Deep rose-pink.  
**JANET.** White.  
**TOMMY.** Marine-blue.  
**KENNETH.** Crimson.

**Any of the above: Pkt., 15c.**

**PERENNIAL SWEET PEAS.** (*Lathyrus latifolius*.) (Hardy Sweet Pea). Very decorative, climbing vine of the Pea family for growing on fences, trellis, etc., and for cutting. Blooms all summer if the seed pods are removed. Mixed.

**Pkt., 10c; oz., \$1.25.**

### Tithonia

(Torch Flower)

A quick growing summer annual that thrives on hot weather, as easy to grow as Zinnia. Brilliant orange-scarlet flowers resembling a Dahlia borne on long, stout stems on a compact plant waist high. A cut flower for garden use, blooms cut in the bud will open and last several days. Subject to no pests or disease.

**Pkt., 25c; 1/4 oz., 75c; oz., \$2.50.**







Verbena

## Verbena (A)

(12,500 seeds per oz.)

One of our trustworthy garden companions. Of trailing habit. The foliage makes a perfect carpet and a fine background for the broad, flat flower heads of many brilliant colors. Sow in boxes in the house and transplant when seedlings are an inch high, and set outside after danger of frost is past in a warm, sunny spot.

**MAMMOTH MIXED.** Producing in handsome umbels, flowers of large size in beautiful shades of white, rose, scarlet, blue and purple.

Pkt., 10c; 1/4 oz., 45c; 1 oz., \$1.35; 4 ozs., \$4.00.

**SCARLET (Defiance).**

Pkt., 15c.

**BUSH TYPE.** Mixed. Plants of uniform bushy habit, about 8 to 10 inches high, dense flower heads closely massed across the flat-topped plants. Most suitable for borders. This mixture will include "Firelight," Roselight, Salmon Queen, Snow White, Starlight, as well as others selected from introducer's breeding grounds.

1/4 oz., \$1.20; 1/8 oz., 65c.

**VIOLA, Blue Perfection.**

Pkt., 50c.

**VIOLA, Jersey Gem.**

Pkt., 50c.

**VIOLA, Mixed.**

Pkt., 15c.

**VINCA, Mixed.**

Pkt., 15c.

**VIRGINIAN STOCK, Mixed.**

Pkt., 10c.

**WILD GARDEN MIXTURE** is a revelation. You will get flowers you have never seen before. It is beautiful for that odd spot or in borders.

Pkt., 10c.

All prices quoted herein are subject to available stocks on hand, and subject to change without notice.

## Zinnias (A)

(2,500-4,000 seeds per oz.)

Splendid hardy annuals making a brilliant profusion of color and succeeding well in any soil. They will retain their beauty for several weeks and bloom until frost.

**GIANT DAHLIA-FLOWERED.** Height 2 1/2-3 ft. In formation the broad petals are imbricated, sometimes seeming almost to be piled one upon the other. The flowers often measure 4 inches in depth and 6 to 8 inches in diameter. In general appearance the flowers compare with the show Dahlias.

Oz., \$1.00; 4 ozs., \$3.50; 1 lb., \$12.00.

**DAHLIA-FLOWERED CRIMSON.** Pkt., 15c.

**DAHLIA-FLOWERED ORANGE AND GOLD.**  
Pkt., 15c.

**DAHLIA-FLOWERED SCARLET.** Pkt., 15c.

**CALIFORNIA GIANTS or COLOSSAL.** The flowers are gigantic in size, 3-4 ft., thickly set with velvety petals. Make fine cut flowers especially for florists, as they can be forced nicely in the greenhouse. Flowers are flat with long stems. Mixed colors.

Oz., \$1.00; 1/4 lb., \$3.50; 1 lb., \$12.00.

**GIANT DOUBLE LAVENDER.** Pkt., 15c.

**GIANT DOUBLE PURPLE.** Pkt., 15c.

**GIANT DOUBLE CRIMSON.** Pkt., 15c.

**GIANT DOUBLE ROSE.** Pkt., 15c.

**GIANT DOUBLE YELLOW.** Pkt., 15c.

**GIANT DOUBLE ORANGE.** Pkt., 15c.

**GIANT DOUBLE PINK.** Pkt., 15c.

**GIANT DOUBLE WHITE.** Pkt., 15c.

**LILLIPUT DOUBLE, MIXED, or "POMPON."** Height 1 1/2 ft. The plants form handsome little bushes and fairly bristle with tiny, short-stemmed, very double flowers hardly exceeding a daisy flower in size. They are pretty plants.

Pkt., 10c; oz., \$1.00; 4 ozs., \$3.75.

**FANTASY.** This new Fantasy mixture with rounded flowers is composed of a mass of shaggy, raylike petals which give a delicate and refined appearance to the medium sized double flowers. The color range includes the brightest shades of red and orange, as well as the popular pastel pinks and cream.

Pkt., 10c; 1/4 oz., 30c; 1 oz., 90c; 4 ozs., \$2.75; 1 lb., \$8.00.

**DOUBLE FANTASY MEXICANA HYBRID.** Pkt., 15c.

**INDIAN SUMMER GIANT MIXTURE.** Pkt., 15c.

**ALL GIANT PASTEL MIXTURE.** Pkt., 15c.

**CREeping ZINNIA.** Pkt., 15c.

**CUPID TINY TIM.** Pkt., 15c.



Lilliput Zinnias



*"The Heart of Every Home"...*

*A Lovely Garden!*

If you want to achieve the garden that will be the envy of the neighborhood and win praise from friends, be sure that you feed it.

Feed everything you grow with Vigoro, complete plant food made by Swift & Company.

Vigoro is balanced for grass—helps develop deep, sturdy roots—and an abundance of top grass.

You'll find Vigoro EXTRA convenient for it is fine for feeding everything you grow.

A P R O D U C T O F S W I F T

**VIGORO**  
COMPLETE PLANT FOOD



### VIGORO PRICES:

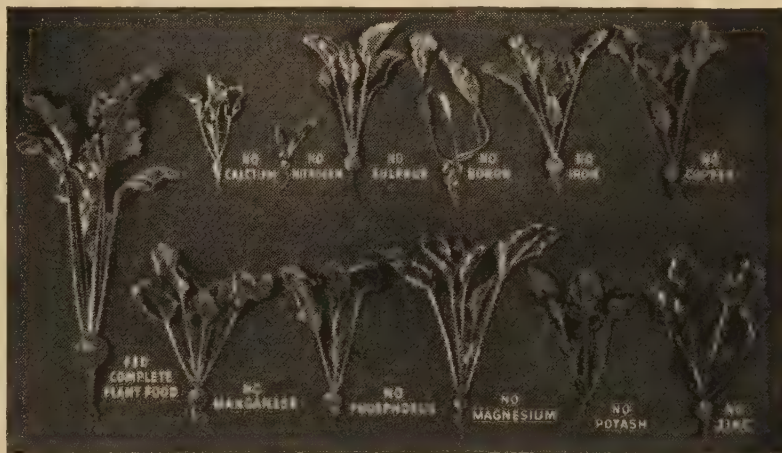
100-lb. bag	.....	} Prices on Request.
50-lb. bag	.....	
25-lb. bag	.....	
10-lb. bag	.....	
5-lb. bag	.....	
1-lb. bag	.....	

The picture below shows the results of a test made with Beets growing in sterile sand. The one fine Beet received all the elements whereas each of the others received all but one. Here is photographic proof that plant feeding, more than any other factor except good seed, determines the success of the gardener.

The picture at the right clearly indicates the necessity of feeding complete plant food . . . and that's the reason we recommend that you feed everything you grow Vigoro Complete Plant Food. Order enough for your lawn, flowers, vegetables, trees and shrubs. You'll need 3 lbs. per 100 sq. ft. of lawn and 4 lbs. per 100 sq. ft. of flowers, vegetables, etc.

**INCLUDE VIGORO  
IN YOUR SEED ORDER!**

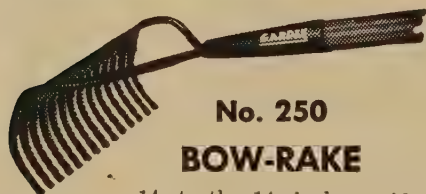
**Use a Vigoro spreader. Detailed information on page 60.**





# GARDEX Hand Tools

## GARDEX



**No. 250**

### BOW-RAKE

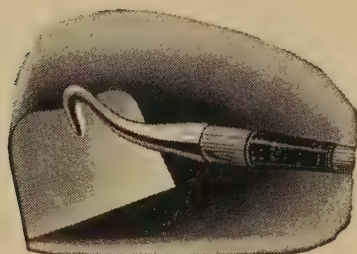
14 tooth, 14 inches wide, depth of head  $3\frac{3}{4}$  inches, handle 5 feet. Mailing weight 5 lbs. \$2.05 each.



**No. 253**

### Floral Rake

10 teeth,  $7\frac{1}{2}$  inches wide, depth of head  $2\frac{9}{16}$  inches, handle  $3\frac{3}{4}$  feet. Mailing weight 3 lbs. \$1.45 each.



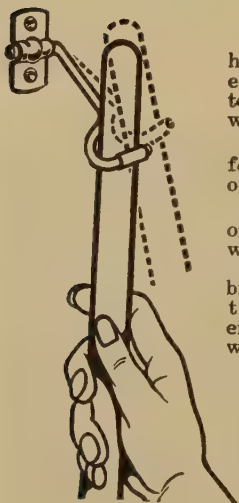
**No. 906 1/2 Garden and Field Hoe**

Sharpened blade, half polished, of high carbon steel, width  $6\frac{1}{2}$  inches, 4-ft. handle. Mailing weight 4 lbs. \$1.35 each.



**No. 121-5**

Has a single bow for close-in work. Ideal for shrubbery and under plant leaves. Light in weight, 5 inches wide, 4-ft. handle. Mailing weight 4 lbs. \$1.75 each.



**"HANG-IT"**

How often haven't you wanted to hang your tools up out of the way?

No springs to force, wear or pry open.

Quickly insert or remove handle, with one hand.

Holds mops, brooms, garden tools, shovels either handles of wood or metal.

No home should be without several of these handy "HANG-ITS". 15c, postpaid. Box of 4 50c.

**No. 403 Lawn Sweep**

Made of special tempered spring steel with flat, flexible teeth. 22 teeth, 18 inches wide, handle  $3\frac{1}{2}$  feet. Mailing weight 4 lbs. \$1.65 each.



**No. 404 Wire Broom**

Made exactly as the No. 403 except it has round wire teeth. 20 teeth, 20 in. wide, handle 4 feet. Mailing weight 4 lbs. \$1.80 each.



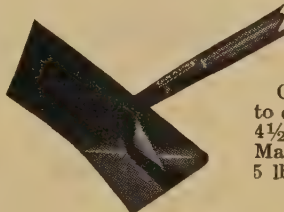
**No. 740 Trowel**

High carbon steel blade. Depth  $5\frac{1}{8}$  inches, width  $3\frac{1}{4}$  inches, over-all length  $11\frac{1}{4}$  in. Mailing weight 10 ozs. 80c each.



**No. 741 Transplanting Trowel**

High carbon steel blade. Depth  $5\frac{7}{8}$  in., width 2 in. Over-all length 12 in. Mailing weight 10 ozs. 80c each.



**No. 400 Turf Edger**

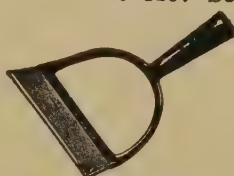
Can be held to cut any depth.  $4\frac{1}{2}$ -ft. handle. Mailing weight 5 lbs. \$2.50 each.



**No. 1503 3-Tine Cultivator**

Designed for loosening and air conditioning the soil,  $3\frac{1}{2}$  inches wide, 4-ft. handle. Mailing weight 5 lbs. \$1.65 each.

**No. 4107 Scuffle Hoe**



A push type hoe for drive-ways as well as gardens. 7 in. wide, Depth  $1\frac{1}{2}$  in. Handle  $4\frac{1}{2}$  ft. Mailing wt. 4 lbs. \$1.85 each.

**No. 1635 Diamond Point Hand Cultivator**

7 tools in one. It's interchangeable for wide or narrow rows or to straddle row. Adjustable 1-3/16-inch to 8-inch width.  $4\frac{1}{2}$ -foot handle. Mailing weight 6 lbs. \$3.10 each.



**No. 1605 Hand Cultivator**



7 tools in one cultivator. Can be changed in a jiffy. Ideal for hotbeds or greenhouses. Adjustable  $\frac{3}{4}$ -inch to 7-inch width.  $4\frac{1}{2}$ -ft. handle. Mailing weight 5 lbs. \$2.35 each.

**No. 1553 Improved 3-Prong Cultivator**

Diamond point shares 6 inches wide, handle  $4\frac{1}{2}$  ft. Mailing weight 5 lbs. \$2.25 each.



**No. 732 Midget Culti-Hoe**

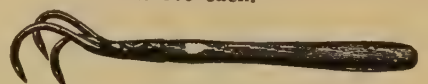
Has 3 prongs and a square, sharpened blade  $2\frac{3}{8}$  inches in width. Over-all length 12 inches. Mailing weight 10 ozs. 70c each.



**No. 721**

### Midget Culti-Spade

Has 2 prongs and a pointed, sharpened blade  $2\frac{3}{8}$  in. in width. Over-all length 12 in. Mailing weight 10 ozs. 60c each.



**No. 713 Midget Cultivator**

For use in small beds and narrow rows, 3 inches wide. Over-all length 11 inches. Mailing weight 10 ozs. 50c each.



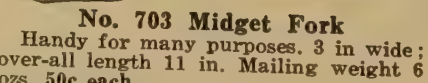
**No. 714 Midget Culti-Weeder**

Same as No. 713 with weeding blade added. Mailing weight 10 ozs. 60c each.



**No. 703 Midget Fork**

Handy for many purposes, 3 in wide; over-all length 11 in. Mailing weight 6 ozs. 50c each.



All tools subject to 3% Michigan State Sales Tax and f.o.b. Grand Rapids, which means that postage will be extra. You can figure the postage rates listed on page 3, but any money that is sent us that is not needed, will be promptly refunded when the order is shipped.

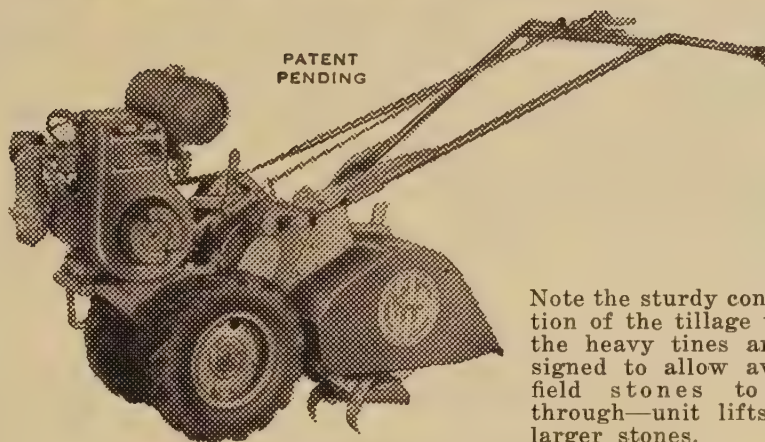




## ROTARY GARDEN TILLERS

**GUARANTEED  
TO INCREASE  
CROP YIELD**

The purpose of Rotary Tillage is to mulch vegetation throughout the tilled depth. To make available more minerals and moisture for plant crop roots. To save time, labor and fuel—increasing crop yield and farm profits. One of the most important reasons for Rotary Tillage is to put back into the soil those minerals that have been removed over a period of years. Here is a tool that will help the grower return his land to the status in which our forefathers found the soil when they migrated to this country.



Note the sturdy construction of the tillage unit—the heavy tines are designed to allow average field stones to pass through—unit lifts over larger stones.

## PLANET JR. TOOLS

We handle the Entire Planet Jr. Line of Tools and Tractors, as Well as Repair Parts. Write for Catalog and Price List.



### No. 13 Double Wheel Hoe

To those who like a double wheel cultivator we recommend this machine. The two wheels make the going more steady.

### No. 219 Cultivator with Fertilizer Attachment

This handy machine answers the call for a light, inexpensive, practical tool for side-dressing growing crops. Small enough to go between 12-inch rows. It will handle nitrate and commercial fertilizers.



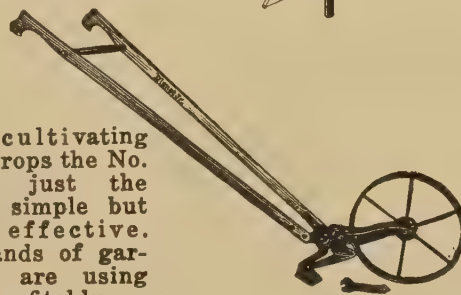
### No. 300 Planet Jr. Seeder

The ideal machine for the market gardener. Drops evenly and accurately any vegetable seed from the smallest up to Bush Lima Beans. New style waved feed wheel does not crush or break Beans or Peas. Hopper can be removed in a few seconds to empty leftover seeds.

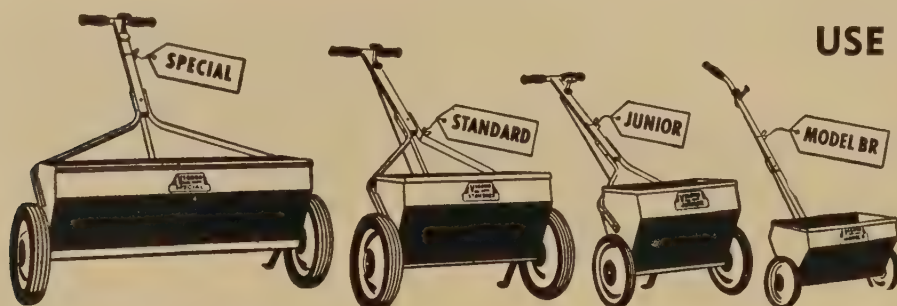


### No. 18 Single Wheel Hoe

For cultivating small crops the No. 18 is just the thing; simple but very effective. Thousands of gardeners are using them profitably.







**SPECIAL**  
Width, 36 in. Capacity 100 lbs.

**STANDARD**  
Width, 24 inches. Capacity 65 lbs.

**JUNIOR**  
Deluxe model. Rubber-tired. Width 16 in. Capacity 35 lbs.

**MODEL BR**  
Width, 16 inches. Capacity 15 lbs.

## USE A VIGORO SPREADER!

Once you use a Vigoro Spreader you'll say it's just as important as your lawn mower. . . . Applies Vigoro at proper rate of application quickly and easily. Sows grass seed to perfection at a big saving in seed. All models sturdily constructed of metal to last many years.

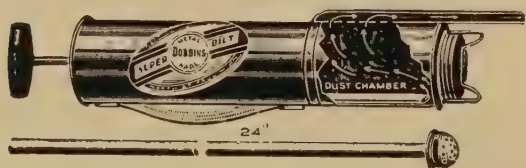
### ASK FOR PRICES

Do a better job of applying Vigoro, lawn seed, etc. Saves time, money and labor.

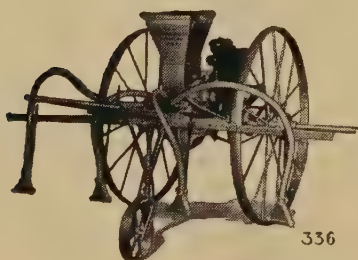
## The Messinger Line of Dusters



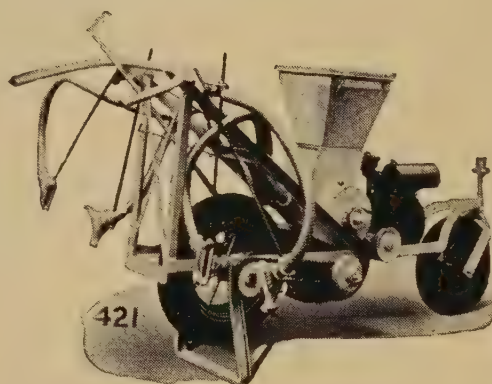
No. 766A Hudson Admiral Duster. Used effectively in gardens, yards, homes, farms, small fields for applying any kind of powdered insecticides, or weed killers. Pump is  $2\frac{1}{2} \times 9\frac{1}{2}$ ; powder reservoir  $2\frac{3}{4} \times 6$  in. Capacity 1 quart, with 21 in. seamless tube and swivel nozzle to direct in any direction.



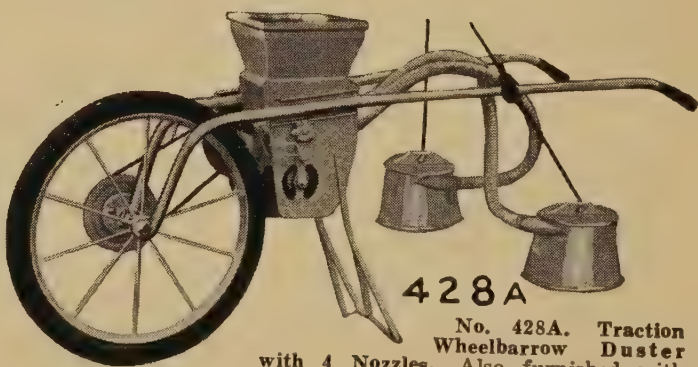
No. 132 Dobbins Hand Dust Gun. Ideal for all garden dusting.



No. 336—SEp-4 V Self-Propelled Duster. With adjustable wheel gauge.



No. 421 SEPT-4 V. Two rows, two "V" type nozzles per row. Self propelled tandem duster. Also No. 336 SEP-4 V self-propelled duster and No. 485 tractor mounted dusters.



No. 428A. Traction Wheelbarrow Duster with 4 Nozzles. Also furnished with two "V" nozzles or two whirlpool nozzles as shown.

## SPRAYERS



No. 403 Hudson "Misty." No drip tin sprayer. Quart capacity with big Nu-Action pump.



No. 208 "Super Cloud" Nebulizer.  $\frac{1}{2}$  pint ribbed emerald-green jar.



No. 440 Hudson "Handy." Full quart capacity. Heavy tin plate; locked seamed and sealed.



SPRAYERS (Con't)



No. 291G Hudson "Booster." 3 1/2 gal. cap. tank. Prime galv. steel. Built-in funnel top.



No. 341 Hudson "Climax." Tank 2 3/4 gal. cap., galv.



No. 8 Dobbins De-Luxe Garden Sprayer. Tank 2-gal. cap. galv. steel, funnel fill top, 3 ft. 3/8 in. high pressure hose, 12-in. curved brass extension.



No. 34G Dobbins Bighead Sprayers. Tank 3 1/2 gal. capacity. The Bighead provides a large 4" diameter opening for filling, and permits positive cleaning. 30 in. of 3/8 in. high pressure hose, 24 in. brass extension, with aphid angle nozzle.

Flame Sprayer

No. 210 Dobbins Flame Sprayer. It burns, heats, disinfects, sterilizes, thaws, dries. Flame temperature 2000 degrees. 4-gal. capacity heavy galv. steel tank, 7 ft. of 3/8 in. high pressure hose. Heavy steel welded torch of improved design. Positive needle valve control.



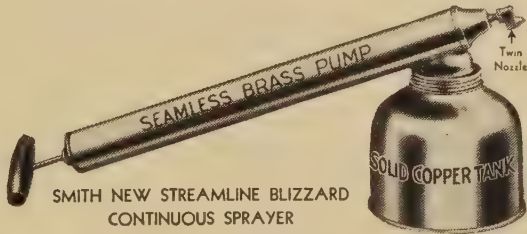
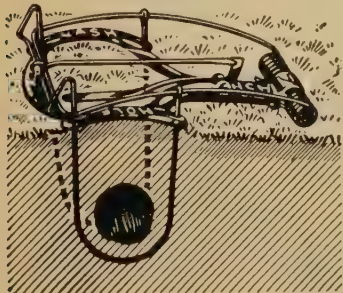
Felins Torrent Bunch Washer.  
Felins Root Crop Washer.

Prices quoted on request.

Nash Choker Loop Mole Trap

The Only Trap That Always Catches The Mole In All Kinds of Ground

Both the choker wires are made of a single piece of metal, bent to the desired form, so that they are held perfectly in place, not depending on numerous joints. The springs which operate the trap are of one piece of best Gamma spring steel, while the trap as a whole is strong enough so that no clods, stones, sticks or anything of that kind prevents its perfect operation.



No. 14P Continuous Sprayer

Streamlined, solid copper tank; seamless brass pump 14 in. by 1 1/2 in. Complete sprayer, highly polished and lacquered. Very attractive. Quart size \$4.25.

Electric Tying Machine

The Felins Electric Tying machine is a great time saver. Will handle 6- to 16-ply cotton twine as well as No. 13 and No. 17 braid. Is equipped with a 1/4 h.p. electric motor, 110 volts. Top speed 45 bunches per minute.

FELINS FOOT POWER MACHINE

Like the electric tyer this machine is well constructed, dual roller bearings being used where needed. Ties 6- to 16-ply cotton twine and No 13 braid. Illustrated circular and prices on request.

Hedge Trimmer



A Real Tool for a Real Job!

Built to give enduring service. Has 1/4 H.P. universal motor with die-cast aluminum housing and handy thumb-operated toggle switch. Special alloy gears. Cutter blade 12 inches long, is made of finest crucible steel. Price includes 6 feet of best rubber covered cord. Price upon application.



# "Green Spot" Garden Hose Equipment

## H-353 Quick Hose Connector

This is the accessory you have been waiting for. It reduces to a fraction the time and bother of attaching hose-to-faucet, hose-to-hose, or hose to accessory. The flexible hydraulic seal and locking device have been improved to eliminate any possibility of leaking or pulling apart. The coupling is free-swiveling to prevent any twisting strain on the hose. Made of solid brass, "just snap it on" that's all. Mailing weight each 6 ozs. Price \$1.00.

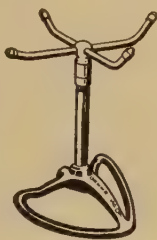
H-353-1. Separate female threaded end for each accessory. Mailing weight 2 ozs. Price 35c.

H-353-2. Separate male threaded end for each accessory. Mailing weight 3 ozs. Price 70c.



## H-346 Four-Arm Sprinkler

Each arm is made with a different nozzle and pre-set at a different angle. The spray from each arm is thereby directed over various circular rings at different distances from the sprinkler. This means an equal distribution of water throughout the entire area covered. The low streamlined base is heavy enough to prevent wobbling while the sprinkler is in operation or tipping over when moved. Mailing weight 3 1/4 lbs. Price \$4.25.



## H-255 Multiple Lawn Sprinkler

This is the sprinkler for long, narrow areas, irregularly shaped areas, steep banks and particularly hard, clay soils that do not readily absorb water. Can be used singly to water small areas up to 15 feet in diameter, or in multiples as needed. Each sprinkler is equipped with a removable end cap. Mailing weight each 9 ozs. Price, each \$1.00.



## H-265 Fan Spray

This accessory was designed especially for watering plant roots without wetting the foliage or washing out top soil from roots. Protects many flowers from damaging fungus diseases that develop when the leaves are wet. Made of wrought brass in a bright dipped finish. Mailing weight 4 ozs. Price 60c.

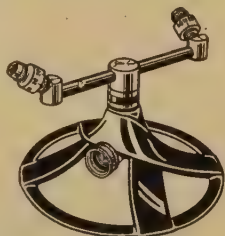


## H-262 Heavy Duty Fan Spray

Heavy forged brass body and precision pierced front plate. Price each \$1.25.

## H-366 Weather-Matic Sprinkler

Two-arm, fully adjustable. Just set the nozzles for any desired distance, from 10 to 50 feet. Smooth, quiet action is assured, thanks to the full ball bearing mounted head. It is non-rusting, and precision made with head, arms and nozzles of solid chrome plated brass. The green enameled base is of heavy cast iron, and will not wobble or tip when being dragged. Price each \$7.95.



## H-333 "Y" Hose Connector

Many have only one faucet on the outside of their homes. They, particularly, will appreciate this "Y" connector. With it, one sillcock can do the work of two, allowing the attachment of two lengths of hose and the use of two accessories at the same time. Made of cast brass. Mailing weight 9 ozs. Price 85c.



## H-344 Goose Neck

A little known item but this extension allows connection of hose to faucet without skinned knuckles. Stops hose kinking and bending at the faucet. Made of cast brass. Mailing weight 9 ozs. Price \$1.00.



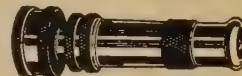
## H-375 Standard Hose Nozzle

Produces a solid stream, various types of spray, and has a positive shut-off. Machined from solid brass with an attractive machine finish. Mailing weight 9 ozs. Price \$1.00.



## H-360 Heavy Duty Hose Nozzle

It was designed to give a lifetime of trouble free service. This is the best in hose nozzles. Machined from solid brass with a self centering floating stem and a non-rising control sleeve. Outer body heavily knurled for easy finger tip operation. Mailing weight 10 ozs. Price \$1.35.



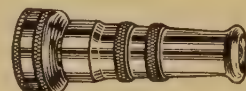
## H-226 Round Flower Sprinkler

This sprinkler with its large diameter (4 inches) head delivers a volume of water in a fine spray for distances up to 13 feet. There is no better hand sprinkler for porous, sandy soil that needs frequent, heavy watering. It makes an excellent outdoor shower for the children. Made of wrought brass, satin finished and lacquered. Mailing weight 6 ozs. Price 85c.



## H-3375 Chrome Hose Nozzle

"New." This nozzle is accurately machined from solid brass and heavily chrome plated. Will withstand years of hard usage. Price \$1.10.



## H-357 Rubber Washers

Fits all standard size equipment. Supplied mounted 10 to a clip. Price 5c per clip.

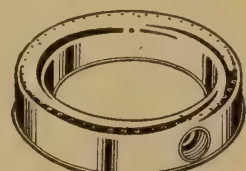
## H-263 Crescent Sprinkler

Can be moved without shutting off the water. Covers areas up to 10 feet wide and 20 feet long. Made of wrought brass with bright finish. Price \$1.45.



## H-264 Ring Sprinkler

Sprays up to 20 feet. Made of wrought brass for long life. Price \$1.70.

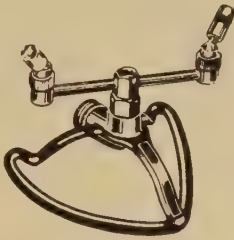


All the items on this page are not postpaid. Postage will be extra, and we will ask that you consult the postal rates on page 3, but in any case any money that is sent us that is not needed will be promptly refunded when the order is filled. Be sure to include the 3% Michigan State Sales Tax.



### H-334 Two Arm Adjustable Sprinkler

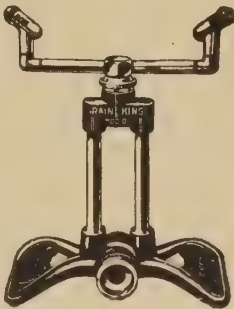
The most versatile of all sprinklers; the two arm adjustable gives correct water coverage to large lawns as well as narrow plots with a spray ranging from a fine mist to coarse heavy rain. The nozzles themselves, which lock securely at any angle, are machined from solid brass to provide the same complete range of sprays as obtained from the best garden hose nozzle. Price \$5.25.



### RAIN KING SPRINKLERS

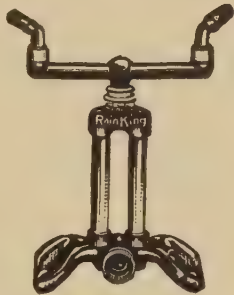
#### Rain King Sprinkler Model "D"

Can be adjusted to operate slow or fast. Will operate on any water pressure. Mailing weight 4 lbs.



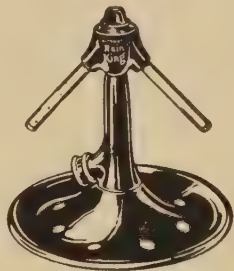
#### Rain King Sprinkler Model "H"

Chrome plated. Adjustable for coarse or medium shower. Can be used for revolving or stationary sprinkling by simply turning lock wheel. 11¼ inches tall; 9¼ inches from nozzle to nozzle. Mailing weight 5 lbs.



#### Rain King Sprinkler Model "K"

Automatic, new sensational sprinkler that you can set instantly to sprinkle any size circle 5 to 50 feet, by simply turning the button on top of the sprinkler. Mailing weight 5 lbs.



No. 119

8-inch Original "Snap Cut" finished in chrome.



"MIRACLE". Revolutionary new basic design makes it the easiest working shear ever. Blades cannot stick shut or spread out of alignment; cuts thinnest or toughest grass or weeds. Blades oil hardened and hollow ground. Red enameled handles.

### CYCLONE SEED SOWER

**Broadcasts Evenly—Saves Seed—Saves Labor**  
Uneven seeding is wasteful. The Cyclone will sow many acres per hour, any amount per acre. Does the work quickly and saves labor.  
Many hundred thousand farmers in America, Canada, Europe and other countries have relied on it for sowing Clover, Timothy, Alfalfa, Lespedeza, Sudan Grass, Oats, Wheat, or any other seed that is sown broadcast.



**Construction**—Its well known double feed insures a uniform flow of seed. Sloped feed board keeps hopper properly filled. Feed adjustment is automatic and starts or stops flow of seed instantly. Distributing wheel scatters seed evenly—throws equal amounts to equal distances on each side of operator. Price f. o. b. Grand Rapids.



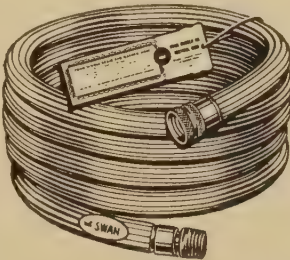
### Hole-in-One-Planting Tool

Brings to you an improvement far in advance of former planting methods. The tapered cup removes the soil and makes a perfect planting hole in one operation. It's used in small city gardens, large estates or commercial nursery. Ideal for bulb planting. Merely push the tool into the soil with a slight twist. Continue this motion as you remove the tool and the soil comes with it. Mailing weight 1 lb. Price 85c.

## SWAN GARDEN HOSE

No. 127 Swan two braid, green neoprene cover, guaranteed for 15 years.			
¾ in. coupled	25 ft.	.....	\$ 6.25
¾ in. coupled	50 ft.	.....	11.75
No. 708 Swan single braid, red neoprene cover, guaranteed for 10 years.			
¾ in. coupled	25 ft.	.....	\$5.25
¾ in. coupled	50 ft.	.....	9.75
No. 705 Swan single braid, black neoprene cover, guaranteed for 5 years.			
¾ in. coupled	25 ft.	.....	\$4.75
¾ in. coupled	50 ft.	.....	8.75
No. 703 Swan single braid, black rubber cover.			
¾ in. coupled	25 ft.	.....	\$3.80
¾ in. coupled	50 ft.	.....	6.85
No. 857 Swanite single braid, green plastic cover, guaranteed for 10 years.			
½ in. coupled	25 ft.	.....	\$ 4.95
½ in. coupled	50 ft.	.....	8.95
½ in. coupled	75 ft.	.....	13.25

No. 867 Swanite single braid, green plastic cover, guaranteed for 10 years.			
¾ in. coupled	25 ft.	.....	\$ 6.00
¾ in. coupled	50 ft.	.....	10.95
¾ in. coupled	75 ft.	.....	16.00
No. 858 Swanite single braid, red plastic cover, guaranteed for 10 years.			
½ in. coupled	25 ft.	..	\$ 4.95
½ in. coupled	50 ft.	..	8.95
½ in. coupled	75 ft.	..	13.25
No. 868 Swanite single braid, red plastic cover, guaranteed for 10 years.			
¾ in. coupled	25 ft.	..	\$ 6.00
¾ in. coupled	50 ft.	..	10.95
¾ in. coupled	75 ft.	..	16.00





# Niagara

Niagara Chemical Division Food Machinery and Chemical Corporation manufacture a complete line of fruit and vegetable spray and dust materials, and also a varied line of both power driven and hand operated dusters.

Only a few of the several hundred Niagara products are listed below. Information on other Niagara products will be furnished on request.

## Fungicides

**KOLOFOG AND KOLOSPRAY.** Fused bentonite sulphur product. Excellent sulphur fungicides for fruit diseases. Non-caustic, adhesive.

**PURATIZED AGRICULTURAL SPRAY.** Organic mercury spray for Apple scab.

**KOLOFOG 100.** A sulphur-naphtha quinone combination for Apple scab and brown rot on Peaches.

**CARBAMATE.** A formulation of ferbam for many fruit diseases.

**C-O-C-S.** Copper oxychloride sulphate (55% copper) for late and early blight and certain other diseases of Potatoes, Tomatoes and other vegetables. Available as a spray and in various dust combinations.

**SOLUBLE SULPHUR.** Dormant spray for Peaches.

**Z-C.** (Dust or spray). Formulations containing ziram for the control of certain fungus diseases of Tomatoes and other vegetables.

**KOLODUST.** Fused bentonite sulphur dust for Apple scab, brown rot on stone fruits and various other fruit diseases.



**C-O-C-S COPODUST.** A copper fungicide for use in the control of early and late blight on Tomatoes, Potatoes, Celery and certain other vegetables having hardy foliage. 1-lb. cans and 5-lb. bags.



**C-O-C-S CUKE AND MELON DUST.** A combined insecticide and fungicide containing calcium arsenate and copper, for the control of Cucumber beetles, wilt, scab, mildew and leaf spot on Cucumbers, Melons and other cucurbits. Effective and safe, this formulation contains no lime. 1-lb. cans and 4-lb. bags.

**Niagara**  
FARM AND GARDEN BRAND



**ROTENONE BEARING DUST OR SPRAY.** Contains .75% Rotenone. For use as a dust or spray in the control of Mexican Bean beetles, aphids on Peas, Flea beetles on Peppers and Egg Plants, worms on Cabbage, Broccoli, Cauliflower and Brussels Sprouts. Also controls Asparagus beetles and Tomato fruit worm. A non-poisonous dust or spray. 1-lb. cans and 4-lb. bags.



**NEW POMO-GREEN.** A completely new insecticide and fungicide combination for Roses and many other ornamental plants. New Pomo-Green is leaf-green in color and leaves no unsightly residue when used as directed. New Pomo-Green may be applied as a dust or a spray for the control of black spot, powdery mildew, aphids, Rose chafer, Japanese beetle, leaf roller, leaf hopper, red spider and many other chewing and sucking insects and diseases. 1-lb. cans and 4-lb. bags.





**CHLORDANE DUST OR SPRAY.** Contains 6% Chlordane, for use in the control of grasshoppers blister beetles, leaf miners, mole crickets, Japanese beetles, and certain other turf insects. Also ants and roaches in the lawn and home. 1- lb. cans and 4-lb bags.



**KOLO FRUIT TREE DUST OR SPRAY.** Contains DDT, basic lead arsenate and Kolo sulphur. A combined insecticide-fungicide formulated for insects and disease control after the dormant stage. Used on Apples, Peaches, Pears, Plums, Prunes and certain ornamentals. For use as a dust or spray. Three pounds makes 25 gallons of dilute spray. In 1-lb. bags and 3-lb. bags.

Dusters

A complete line of orchard and row crop dusting machines with especially adapted units for muck crops, Blueberries and large capacity fruit dusters. Write for descriptive literature.



NIAGARA  
CYCLO-  
JUNIOR  
DUSTER

Weed Killers and Plant Hormones

**AMSOL.** Contains 66.8% amine salt of 2,4-D.  
**ESTASOL.** Contains 44% propyl ester of 2,4-D.  
**NIAGARA STIK.** Spray and dust formulations of naphthaline acetic acid for thinning and preharvest anti-drop applications on Apples.

**NIAGARA STIKOL.** A TCPPA formulation for pre-harvest applications on Apples to promote color and to prevent early fruit drop.

**SPERGON AND SPERGON S-L.** Seed treatment fungicides.

**COMBINATION DUST AND SPRAY SPECIALTIES.** Insecticide-fungicide combinations made for specific use on specified crops.

Dust and spray formulations available for Cucumbers, Melons, Potatoes, Tomatoes, Onions, Celery, Asparagus, Strawberries, Blueberries, Mint, Apples, Peaches, Cherries, Grapes, etc.



**2,4-D WEED KILLER.** Amine form. Kills dandelions, plantain, poison ivy, pig weed, rag weed, bindweed in lawns, parks, golf courses, fence rows, roadsides, ditches and pastures. This material will not harm the desirable grasses when used as directed. 6 level teaspoonfuls will make 1 gallon of spray which will cover 200 square feet. ½-pt. cans, 1-pt. cans, 1-gal. cans.



**C-O-C-S COPPER ROTENONE BEARING DUST.** A vegetable garden specialty containing .75% Rotenone and copper as a fungicide in the form of copper oxychloride sulphate. A non-poisonous insecticide-fungicide. 1-lb. sifter top cans and 4-lb bags.



**DDT 50 SPRAY.** 50% wettable DDT powder. For use in the control of flea beetles, Colorado Potato beetles, leaf hoppers on Beans, Cabbage, Grapes and Potatoes. Also controls caterpillars on Cabbage, thrip on Onions and Gladiolus, Corn borer, coddling moth on Apples and Pears. Use 1 tablespoonful in 1 gallon of water. Also for use as a dip or spray on livestock. 1-lb. cans and 4-lb. bags.



# Insecticides and Seed Disinfectants



## DuPont Seed Disinfectants and Turf Insecticides



**New, Improved CERESAN.** For Wheat, Oats, Barley, Rye, Sorghums, Millets and Flax, to control smuts and some other seed-borne diseases. Usually reduces seed decay and seedling damping off of Cotton, Flax, Peas and Sugar Beets, surface seed-borne anthracnose and angular leaf spot.

**ARASAN.** For Corn, Sorghums, Peanuts, Soy Beans, Rice, Onions and other vegetables. Usually reduces losses from seed decay and damping off. Two-way action—as a disinfectant, generally destroys many surface seed-borne organisms; as a protectant, generally protects seed against soil-borne organisms responsible for seed decay.

**SEMESAN.** For vegetables, flower seeds and bulbs. Generally preserves seed against rotting in cold, wet soils, controls damping off or seedling blight and certain other seed-borne diseases. Helps promote increased germination, sturdier growth, larger yields, better grade produce.

**SPECIAL SEMESAN.** For lawns, golf courses and other fine turfs. A fungicide used especially to prevent or control large brown patch and dollar spot. Apply as a liquid.



**SEMESAN BEL.** For both Irish and Sweet Potatoes. Treat Irish Potatoes to reduce seed rotting, surface seed-borne rhizoctonia and scab. Treat Sweet Potatoes to protect against seed decay and as a treatment for seed and sprouts to control stem rot, scurf, soil stain or rust.

**TERSAN.** This is an exceptionally effective non-mercurial for prevention or control of large brown patch and dollar spot on golf courses, grass tennis courts, lawns and other fine turfs.

**CORROSIVE SUBLIMATE "Merck."** Used for scab on Potatoes, for the prevention and control of brown patch on lawns, ridding lawns of earth worms also for Gladiolus thrip.

**Calomel, "Merck."** Used for Onion thrip, Potato scab, and neck rot on Gladiolus. A seed treatment for Cabbage and Cauliflower seed as well as field treatment.

**Cuprocide, Yellow (Red Copper Oxide).** For seed treatment. Used in greenhouses to prevent damping off and black leg. 3-lb. bags only.

## CYANOOGAS

**Cyanogas A Dust.** Calcium Cyanide for killing all rodents. 1-lb. cans, 5-lb. cans.

**Cyanogas G Fumigant.** For greenhouse fumigation or general fumigation of all enclosed spaces. 4-oz. cans, 5-lb. cans, 25-lb. drums.

**DDT.** Dusts and liquids.

**Dusting Sulphur.** Used for crop dusting. Sold in 100-lb. bags or in bulk.

**Ever Green Garden Spray.** Retail prices: 1 oz., 35c; 6 ozs., \$1.15; 1 pt., \$2.45; 1 qt., \$4.10; 1 gal., to commercial growers, \$12.60.

**Formaldehyde.** Liquid mixed to prevent smut in Onions, Potato treatment, etc. Sold in your container or in 50-gal. drums; also in pt. bottles.



**Red Arrow Spray.** A concentrated rotenone spray in 1-oz., 4-oz., 1-pt., 1-qt., and 1-gal. bottles.

## ROOTONE

**Rootone.** The plant hormone powder is a root forming stimulant when applied to cuttings, seeds or bulbs. This powder gets its root forming activity from the synthetic plant hormones or growth substances which it contains, and is used on grass seeds, vegetable and flower seeds, bulbs of all kinds. 1/4 oz., 25c; 2-oz. bottle \$1.00; 1 lb., \$5.00.

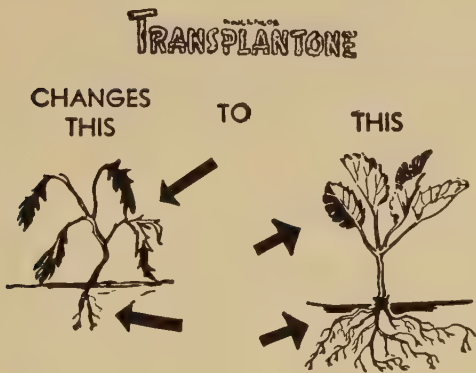
**Rootone No 10.** For woody cuttings only. 2-oz. size \$2.00, postage extra.



**Krop-Saver No. 10 Pyrocid Dust.** Very effective on Cucumber beetles, Squash bugs, etc.



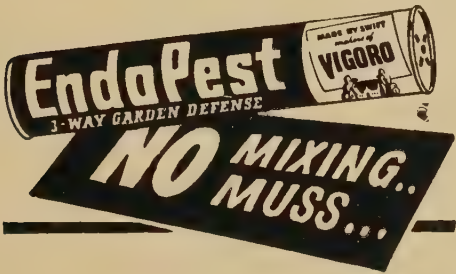
Insecticides and Seed Disinfectants — Cont.



**Transplantone.** For stronger roots. When plants are moved or transplanted many of the feeder roots are broken. The plant usually stops growing until it repairs or replaces these feeder roots. Loss of water causes wilting. Transplantone helps grow new roots and reduces loss of water so the plant starts growing again in a much shorter time.



**Tree-Tox** is the new, complete fruit-tree insecticide-fungicide, containing a scientific blend of two micro insect toxicants, DDT and CHLORDANE; and two micro fungicides, SULPHUR and FERRIC DIMETHYL DITHIO CARBAMATE; chemically treated with adjuvants, spreaders and wettable agents. The use of this single product will control all diseases and insects on Apple, Pear, Cherry, Plum and Peach trees. Ideal for the party with only a few trees, as this ONE product will take care of them all. Prices on request.



... no unsightliness following garden dusting. A few strokes of the exclusive EndoPest dust gun envelops your plants in an almost invisible protecting film. . . gives you control over most chewing insects, sucking insects and fungus diseases! Use with confidence on edible fruit and vegetables. We have refill cartridges for the guns.

MADE BY SWIFT  
MAKERS OF VIGORO

End-O-Pest Prices		
10 oz. gun	.....	} Prices on Request
4 oz. pkt.	.....	
10 oz. refill	.....	
2 lb. pkg.	.....	



**Tree Tanglefoot.** For safeguarding trees and vines against climbing insect pests. Will remain sticky when fully exposed to the weather. Prices upon application.

WE RECOMMEND TRI-GEN



The all-purpose spray for Rose plants. Insecticide, fungicide and plant stimulant all in one.

	Prices
"E" Kits	.....\$1.35
"A" Kits	.....2.25
"B" Kits	.....6.00
"C" Kits	.....9.00

**Tri-Ogen Rose Dust** is especially recommended as a control for certain insects, but as a fungicide it assists in the control of certain mildews and black spot on Roses. Comes in both the 1-lb. and 5-lb. packages. Prices will be quoted on request.

**Tobacco Dust.** Finely ground. Sold in bulk, any quantity, or in 100-lb. bags.

- Weatherproof Pencils. 10c each.
- Garlanite Putty. In 1-gal. cans. Prices on application.
- Greenhouse Staples. The original Van Reyper points. 9/16 in. or 5/8 in. long in box of 1000.
- Zinc Greenhouse Glazing Points.
- Corn Planters.
- Corn Planters with Fertilizer Attachment.
- Potato Planters.
- Potato Planters with Conveying Tube.



**Antrol Ant Traps.** Metal traps that contain two types of specially prepared material that attract and kill both grease and sweet eating ants. Each 15c.

**Antrol Ready Filled Sets.** These convenient sets contain four glass feeders ready filled with Antrol syrup. Safe around children and pets. Sets, each 39c.



**Antrol Syrup Refills.** For refilling "feeders." It kills both sweet and grease eating ants, either inside or outside the house. 4-oz. size, 25c.



# Weed Killers

## Du Pont Ammate Weed Killer

A crystalline material containing ammonium sulfamate as its active ingredient. It has proved to be outstandingly successful for the control of poison ivy, poison oak, ragweed, buckhorn, plantain and certain other weeds.

## FERTILIZERS

G. & O. Rose food analysis, 7-8-5. In 1 lb., 5 lbs., 10 lbs., 25 lbs., and 100 lbs.

G. & O. Rhoda-Azalea food analysis, 3-20-3. In 5-lb. bags.

G. & O. Dahlia, Lily, Gladiolus food analysis, 5-16-5. In 5- and 10-lb. bags.

Prices will be quoted upon request.

G. & O. Weed and Poison Ivy killer, in pts., qts., gallons and 5-gallon containers.



● To rid your lawn of weeds, spray with End-o-Weed, selective lawn weed killer. Kills 'em roots and all. Easy, economical to use.

Presented by Swift

### EndoWeed Prices

1/2 pint liquid .....	} Prices on Request
1 qt. liquid .....	
1 gallon liquid .....	
ENDOWEED SIDE SPRAYER	



**MILORGANITE**  
IDEAL FERTILIZER

Milorganite is a natural unadulterated organic plant food. It contains more of the "basic" fertilizer elements than good old barnyard manure and is richer in the vital "trace elements" also. The effects on growth are long lasting, high in purity, non-burning, and it is easy to use. It is clean, dustless and free flowing. Ideal for lawns, trees, shrubbery and gardens. Prices upon application.

KEM LIQUID PLANT FOOD. 4 ozs., 10c; 12 ozs., 25c; 1 qt., 50c; 1 gal., \$1.00.

HYPONEX PLANT FOOD grows superior plants in soil, sand or water (contains Vitamin B-1.) With Hyponex and water, plants grow luxuriantly, flower abundantly, and develop sturdy growth regardless of the poorness or sterility of the soil. In fact, with Hyponex they will grow and flourish in clean sand, cinders or barren earth. Hyponex is ideal for hydroponics—the science of growing plants without soil. A teaspoonful makes a gallon of liquid plant food, which is enough for one watering of house plants in the average home. A 1-lb. can is sufficient to make 100 gallons. One of the advantages of Hyponex is that it makes a liquid plant food complete and balanced; yet because it is a powder it can be stored or transported easily and there is no spoilage, for it keeps indefinitely. 1-oz. pkt., 10c; 3-oz. can, 25c; 7-oz. can, 50c; 1-lb. can, \$1.00.

APPROX. 70,000,000 LBS. OF AIR-NITROGEN ABOVE EVERY ACRE. THIS IS AVAILABLE FREE FOR SOIL AND CROP IMPROVEMENT IF YOU

**CONVERT LEGUME SEEDS INTO FERTILIZER PLANTS**

Inoculating by with

**NITRAGIN**

ALFALFA RED CLOVER SWT. CLOVER COWPEAS PEAS VETCH A. W. PEAS SOYBEANS LESPEDEZA PEANUTS BEANS ALL LEGUMES

**BUILD UP YOUR SOIL** Inoculate Your Legumes With NITRAGIN

Inoculate your Legume seeds even tho planted on fields that have been inoculated before. Field tests have shown that better crops are harvested when Legume seeds are inoculated even when planted on fields where inoculated seeds of the same Legume crops had grown the previous year.

**NITRAGIN INOCULATION PRICES**

When Ordering, ALWAYS State Name of Seed

COMBINATION (AB)	Size	Retail
LESPEDEZA—Hulled or Unhulled	1 bu. ea. ....	.50
	2 bu. ea. ....	.90
ALFALFA Sweet, Bur, Hubam Clovers	1 bu. ea. ....	.50
CLOVERS Red, Alsike, Crimson, White and Ladino	1 bu. ea. ....	.50
PEAS (All Varieties) VETCHES (All Varieties)	100 lb. size (Inoculates up to 100 lbs.) ea.....	.50
BEANS—Navy, Pinto, Wax, String, Kidney, Gr. Northern	1 bu. ea. ....	.50
PEANUTS, COW PEAS	2 bu. ea.....	.35
	5 bu. ea.....	.55
SOYBEANS (All Varieties, Including Edible)	2 bu. ea.....	.35
	5 bu. ea.....	.55
GARDEN SIZE Garden Peas and Beans Sweet Peas, Lupines and Edible Soybeans	25 bu. (one can) ea..	2.50
Enough for 8 lbs. seed		
	Retail Price 15c each.	

**NITRAGIN—Oldest and Most Widely Used Inoculator in America**



# ACTIVO

**Energizes  
Soils**  
**Activates  
Compost**



## Humus From Compost in 2 to 6 Weeks

Now you can make rich compost fertilizer from all sorts of waste—leaves, grass clips, weeds, table scraps, even sawdust and soot! Turns garbage into ODORLESS humus in 2 to 3 weeks. Use Activo also to energize, condition and balance soils, mulches, hotbeds, etc. . . . to stretch and convert chemical fertilizer . . . to reduce odor in outdoor toilets while converting waste into easily handled, ashlike humus. Other uses. Complete directions with each package. Activo itself is alive with Nature's own vital organisms, hormones, vitamins, minerals; has the pleasant aroma of newly turned earth.

## YOUR OWN ODORLESS FERTILIZER FACTORY

**Free extra premium:** With Nos. 25 and 50 sizes, plans for ingenious Composter Cabinet that makes continuous, odorless compost year around, inside or outside. (Composter plans separately, \$1.00).

### PRICES:

No. 2 size (for 400 lbs. compost or for energizing up to 800 lbs. mulches, fertilizer, soil, etc.) \$1.00, p'd. No. 7 (for 1300-1700 lbs. compost, or 2400 lbs.) \$2.49, p'd. No. 25 (3 tons compost, 10,000 lbs. energizing) \$6.99, p'd. No. 50 (6 tons compost, 20,000 lbs. energizing) \$11.95, charges collect, or \$13.95, p'd.

# HORMEX

**Hormone Concentrate  
For Setting Blossoms  
and Rooting Cuttings**

**Do You Want . . .  
MORE . . . EARLIER . . . SWEETER  
TOMATOES and BEANS?**

**Just Spray With Hormex  
During Blooming**

Use Hormex for all hormone applications. It's a general purpose combination of hormones and vitamins in easy-to-use liquid form that saves you money. Use it to get a bigger yield, **earlier** of TOMATOES, BEANS, BERRIES, CUCURBITS, CORN, ALFALFA, etc. It **stops blossom drop**, fortifies pollination (makes more blossoms set into fruit or seed), and aids plant health . . . use it for rooting cuttings and bulbs. It's root hormones initiate roots, make them grow faster . . . use it to stop pre-harvest drop of Apples, Pears and Cherries; produce more flavorful fruit . . . use it to aid blooming of flower plants and for other valuable applications. Complete directions with every package.

Gold Label makes 3 to 30 gallons spray or rooting solution, \$1.00, prepaid. Economy size, makes 12 to 200 gallons for spray or rooting, \$2.49, prepaid. Big Four size, makes up to 800 gallons for spray or rooting, \$5.95, prepaid.

## Test Your Soil

**ONLY  
\$2<sup>50</sup>**

*For  
this  
famous*



## Sudbury Soil Test Kit

It's first aid to amateurs for finer lawns, flowers, vegetables—the fancier's guide to prize-winning blooms. Shows how to give your soil the right kinds and amounts of fertilizers for all your flowers, vegetables, etc. (125 listed). Also whether lime is needed and how much. Easy to use, intensely interesting, no knowledge of chemistry needed. Ten-minute test tells more than a lifetime of gardening.

**SPECIAL**—complete equipment, instructions and solutions for 20 tests, for nitrogen, phosphorus, potash, acidity.

2 minute Acidity Kit Model	.....\$ 1.00
Home Garden Model (illustrated)	.. 2.50
Jr. Professional Model	..... 4.75
Horticultural Model B	..... 12.50
DeLuxe Professional Model A	..... 24.95



## MANNA-in-a-Pot

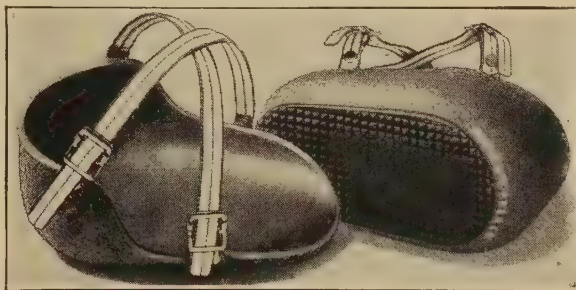
Spray it on, or feed thru soil.

The original hormone-vitamin fortified plant food and transplant starter now packed in a colorful plastic flower pot!

Label slips off, the top becomes a saucer, and you have a durable, washable, light weight, hole-drainage pot for African violets and other plants . . . MANNA contains all essential minerals and plant food in correct proportion and balance; guaranteed to stop root shock of transplanting and start plants fast. Actually will grow better plants even in sand or cinders! Available in both pellets and soluble powder form. Each pellet or half-teaspoon makes a gallon of liquid "grow power" for either foliage or soil feeding, or can be used direct (dry, in soil. \$1.00 size, prepaid, makes 480 lbs. (60 gallons plant food for lawns, garden or potted plants. \$1.95 size, 1200 lbs. (150 gallons). Larger size is most economical buy. Choice green, red and yellow plastic pots.

## Knee Pads

The most comfortable, sturdy, long wearing knee pads available. Constructed of top quality molded rubber, with soft sponge rubber cushion on the inside gives positive protection against sore, aching knees. Light weight, and form fit for any knee. Ideal for anybody who is a down-on-the-knee worker. Mailing weight 3 lbs. Price \$2.50 per pair. Postage will be extra.







# BIRD Vita-Bands

**VITA-BAND D** contains root growth until grower chooses to let root through Band. Only quick, slight pressure is needed to crack Band. Do not remove Vita-Band "D" when transplanting. Band disintegrates in the soil permitting free growth of roots from time of transplant. Nutrient-treated with quickly available plant food.

**VITA-BAND 10** for short growing periods. Will usually contain root growth up to approximately 8 to 10 weeks. Nutrient-treated with quickly available plant food . . . your judgment determines need for additional feeding. Vita-Band 10 is identical to Vita-Band "D" except Vita-Band 10 is removed at time of transplant. Vita-Band "D" is not.

**VITA-BAND "D"** is packed 2,000 to the case—except sizes 3" by 3", 4" by 3", and 4" by 4", which are packed 1,000 to the case. **Vita-Band 10** is packed 1,000 to the case—except for 4" by 3", and 4" by 4", which are packed 500 to the case.



PLANT BANDS	PRICE PER 1000—SIZES IN INCHES							
	1½x1½ x2½	1¾x1¾ x2½	2x2 x2½	2x2 x3	2½x2½ x3	3x3 x3	4x4 x3	4x4 x3
VITA-BAND D	\$3.75	\$4.05	\$4.55	\$5.20	\$5.95	\$6.90	\$9.10	\$11.00
VITA-BAND 10	3.60	3.90	4.40	4.90	5.85	6.75	8.85	11.00

Prices higher in Rocky Mtn., Pacific Coast, Texas and Gulf State areas

**BIRD VITA-BAND • TOM THUMB FLAT • VITA-POTS • RED POTS**



## TRANSPLANTING WITH VITA-BAND "D" BY HAND

1. Place plant in position
2. Squeeze rootball to crack band
3. Set plant and Vita-Band "D" in place

## USING VITA-BAND "D" WITH TRANSPLANT EQUIPMENT

1. Transplant equipment
2. Squeeze rootball to crack band
3. Set plant and Vita-Band "D" in furrow

## FERTO-POTS

For earlier, better crops and bigger profits.

**FERTO-POTS** produce earlier crops and more abundant yields, and are extensively used by the most successful gardeners.

**FERTO-POTS** are constructed of manure and fertilizer in the correct proportions for best plant growth and for holding the moisture at roots of the plants. The plants are not removed from the pots when they are set out. Simply set pot and all in the ground and the roots will grow right through the pot which slowly breaks down, furnishing valuable plant food. Roots are not disturbed and plants not checked.

Carton of 100 No. 3 (3 inch), \$3.25.

Carton of 250 No. 3 (3 inch), \$5.75, not prepaid.



## BIRD RED & VITA POTS



**RED:** For shipping only. Not recommended for growing. Lightweight and sturdily made to protect rootball from breakage—inner wax coating prevents drying out. A "must" to preserve the top quality of your plants in transit. Delivering quality promotes repeat business.

**VITA-POTS:** For growing and shipping—they are nutrient treated. Growing results are similar to Vita-Bands. VITA-POTS prevent rootball disturbance. No handling and storage of heavy pots. VITA-POTS can be

packed quickly and easily for shipment.

### PRICES PER THOUSAND—Sold in Units of 1000 only

RED							
2"	2¼"	2½"	3"	3½"	4"	5"	6"
\$8.60	\$8.60	\$8.70	\$9.15	\$12.20	\$14.70	\$18.15	\$22.25
VITA-POTS							
2"	2¼"	2½"	3"	3½"	4"	5"	6"
14.00	14.30	14.85	16.40	21.60	24.35	31.85	41.70



Wood Veneer Plant Bands

Used by the largest growers of vegetable plants, perennial plants, Carnations, Snapdragons and Stocks, for transplanting to the greenhouse or out-of-doors. Packed 1000 to a carton.

	Shipping Weight	Per 1000
1 3/4 x 1 3/4 x 2 1/2	33 lbs.	\$5.70
2 x 2 x 2	34 lbs.	5.70
2 x 2 x 2 1/2	35 lbs.	5.80
2 1/4 x 2 1/4 x 2 1/2	38 lbs.	6.00
2 1/2 x 2 1/2 x 2 1/2	40 lbs.	6.10
2 x 2 x 3	40 lbs.	6.40
2 1/2 x 2 1/2 x 3	45 lbs.	6.40
3 x 3 x 3 **	55 lbs.	6.80
4 x 4 x 3	60 lbs.	7.10
3 x 3 x 4	60 lbs.	7.00
4 x 4 x 4	65 lbs. Packed 500 to carton.....	8.00

These bands are stapled, and are sold in units of 1000 only. The above prices are quoted f.o.b. Grand Rapids. The \*\* is the most popular size, which will be carried in stock. Other sizes can be obtained on order, but we would suggest that you order early as it will take about 2 weeks to get them in. All prices subject to change without notice, and for shipment direct from factory, we will quote you special prices f.o.b. factory.

WOOD LABELS

For Marking Plants

Plain, Not Printed		50	100	1000
5/8 x 4 in.	.....	\$0.25	\$0.45	\$3.25
5/8 x 5 in.	.....	.30	.50	3.50
5/8 x 6 in.	.....	.35	.55	4.25
5/8 x 3 1/2 in. wired	.....	.35	.60	4.50

Above prices are subject to change without notice and are quoted f.o.b. Grand Rapids. Postage will be extra.

# FLYING DISK

## SCARE Birds and Animals Away

Amazing protection for newly planted seeds, berries, tender seedlings, fruit trees, etc. Made of shining aluminum, FLYING DISKS spin and whirl madly in all directions—give blinding reflections and weird jingling, crackling sounds—to scare birds and animals away. Easily strung across area to be protected—or from branches of fruit trees and vines.

**10 FLYING DISKS** with complete instructions, only **25¢**



# Clever WHITEHALL

## MARKERS FOR EVERY HOME



Our WHITEHALL selection includes unusual designs for every home, lodge or summer cottage. Signs that attach to tree, post or side of house—lawn signs—and wall type markers for any flat surface.

Signs are cast aluminum with leadcoated nameplate and hand-wrought iron bar. Swedish iron finish highlights artistic ornaments. Lettering 20c extra per character or numeral.

You'll also find many attractive new WHITEHALL house signs in our display—including both large and small sizes. Prices from \$6.50.

\* Plus slight charge for lettering



Vanes illustrated are all-metal and finished in weather-proof black to silhouette against the sky. Size: 40 in. high, 30 in. wide. Includes direction letters and Universal Base — \$24.50. Other clever new designs available in a smaller size—\$13.50.



"Spinning Wheel" \$10.75



"Cardinal" \$10.75 (In color \$11.75)

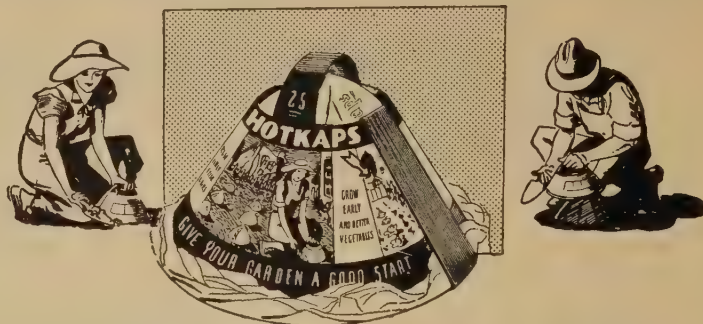
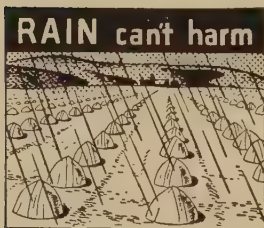
**YOUR NAME IN A JIFFY WITH REFLECTING LETTERS**

Characters are 150 times brighter than paint — and reflect at night when light shines on them.



# Germaco Hotkaps

or Plant Protectors



25 garden size package, complete	\$ .95
100 package, complete	3.15
250 package, complete	5.90
1000 carton—per 1000	18.35
5000 lots—per 1000	18.20
10,000 lots—per 1000	18.05
25,000 lots—per 1000	17.90
Steel setters, each	1.95
Fibreboard setter, each	.20

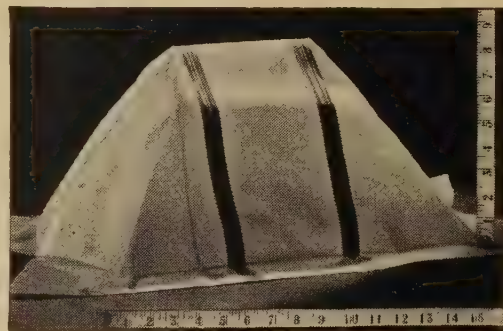
Shipped Prepaid in Michigan.  
We do not split packages of Hotkaps.

## Hot Tents

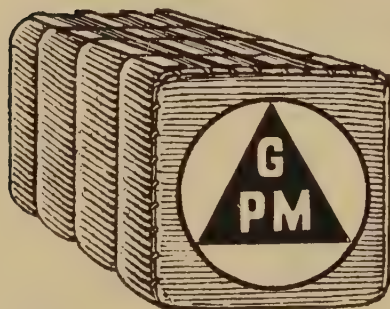
Hot Tents are a product of "Germaco Hotkaps" to give the user a larger area to cover individual plants. Size 14 by 11 inches at the base, 8½ inches high. Weight 70 lbs. per thousand. Per thousand Hot Tents, packed 500 to a carton .....\$26.50  
Hot Tent Setter (steel) ..... 2.60

## Super Hot Tents

Size 18 by 14 inches at the base, 12 inches high. Weight 120 lbs. per thousand. Per 1000 Super Hot Tents .....\$39.00  
Super Hot Tent Steel Setter ..... 3.60  
Shipped Prepaid in Michigan.



## GPM PEAT MOSS FOR YOUR SOIL



GPM Peat Moss is a well known reliable brand with proven value and guaranteed content. All waste foreign matter has been removed.

All plants—grass, trees, flowers and vegetables can only eat food in a thin solution. In other words they must drink it. To make your soil the proper texture to hold food in this thin solution,

you should mix liberal quantities of GPM Peat Moss into your soil. Water then dissolves plant food and the sponge-like texture of GPM Peat Moss holds the solution in readiness for plant use. It will make your plants grow better; produce better flowers; have better color and grow larger.

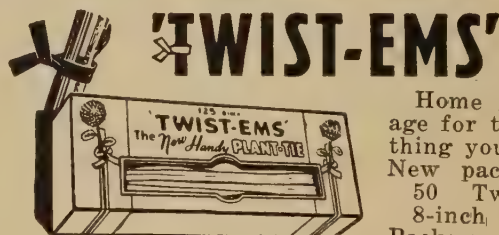
It comes in bales, but also in small bags for every use.

## C-A Wood Preserver

(Carbolineum America.) It is the ideal product to use on posts, poles, ties, sills, joists, floors, silos, hog houses, barns and other wood that is exposed to decay. It will kill chicken mites and fowl ticks. One application should last from one to three years. Mailing weight 13 lbs. Price upon application.

## Copex No. 77

The newest metallic wood preserver and is a positive preventive for dry rot, fungus growth, mildew and termites. It penetrates the wood to form a coating that protects the wood against attacks of all forms of wood destroying insects and organisms. It does not wash or bleach out, and is a positive protection for many years. Its action is to all practical purposes permanent. Does not contain any creosote or tar. Comes in 1-gallon cans.



Twist-ems, 8-inch ..... .25

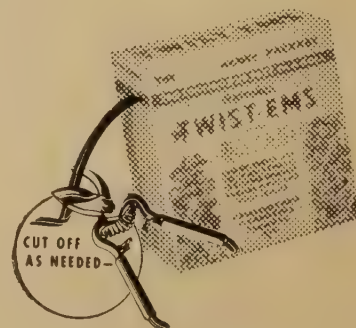
As illustrated above.

For commercial growers, used in tying Carrots, Beets, Onions, Celery and other produce, for market. "A twist of the bunch does the trick."

	Bundle of 250	Per M	2½ M	5 M	10 M	25 M
7-inch	\$0.40	\$1.55	\$1.50	\$1.45	\$1.40	\$1.35 per M
8-inch	.50	1.73	1.67	1.61	1.55	1.49 per M
12-inch	.75	2.62	2.53	2.44	2.35	2.26 per M
16-inch	1.00	3.50	3.38	3.25	3.13	3.00 per M

The postage will be extra.

250 continuous feet on plastic reel \$1.00, post-paid.





# Wolverine Gloves

## Yoo - Hoo! Ladies

They're LANOLIZED\*

So Soft... So Smooth  
On  
Your Hands



# Wolverine PIGSKIN Gloves

YES, LADIES—we surely had you in mind when we ordered a supply of “Lanolized” Wolverine Pigskin Gloves, for your round the the house and garden work. \*So soft, so smooth, because Lanolin has now been added to the Wolverine Secret Tanning process. What a thrill you'll get when you try on a pair, and so little in cost. You'll thank us for urging you to see them.

Many other numbers of Wolverine gloves are carried in stock and we will solicit your inquiries for any others that you may desire.



## WOLVERINE



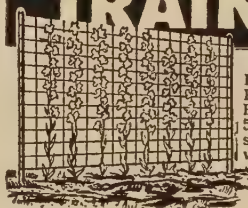
### No. 937 “All-Purpose”

glove for ladies. Light weight, green suede pigskin, slip-on style, inseam, unlined. Comes in sizes 7 and 8. Mailing weight 5 ozs.

### No. 659 Men's Genuine Horsehide

Slip-on pattern, Keystone thumb, inseam, unlined. Mailing weight 8 ozs. Sizes 8, 9, 10, 11 and 12.

# TRAIN-ETTS



Ideal support for SWEET PEAS, GARDEN PEAS, POLE BEANS, CUCUMBERS, TOMATOES. Hung in 5 minutes. Doesn't rot like string, nor burn tendrils like wire.

No. 2 size,  
60x96 inches.  
85c postpaid.

# stikit wicket

REG. U.S. PAT. OFF.

## the modern fencing

### PROTECTS AND BEAUTIFIES



21" High, 12" Wide,  
1/4" steel enameled green

**\$2.40**  
THE DOZ.

Mailing weight 19 lbs.  
In cartons of two dozen  
(makes 24 feet of fence)



Easy to hammer  
into hard ground

### Wickets


Neat, orderly protection around lawns, shrubs, planting beds, etc. Keeps human and animal traffic away. Sturdy 1/4 in. dia. steel, green enameled. Twelve of these Wickets, overlapped about 2 in. make a neat, practical, “Keep Off Please” fence of about 12 feet long. \$2.25 per doz., postage extra.



“JUST SAY”  
**G&O**  
**METAL WICKET SHIELDS**

21"  
13"  
1/4" DIA. STEEL ROD—END TO END 4'

### Fence Rods



33" Overall

33" Overall

PROTECT YOUR NEW LAWN AND FLOWERS WITH FENCE G&O RODS

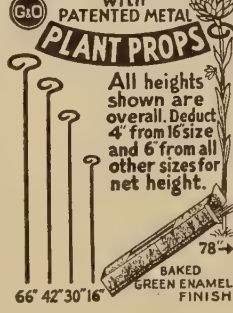
These Fence Rods are made of sturdy 1/4 in. dia. steel with two loops which will support wire, heavy clothes line and even rope. Eliminates the use of irregular slats, broom handles, sticks, rags, etc. Sold at a price everyone can afford. 48 inch. \$2.40 per doz., postage extra.

### Plant Props

No more untidy wood stakes with rag and string ties. Plant Props are neater, termite proof, easier to use (flowers hook right in). Last for years. Made of heavy enameled steel. Used from Alaska to South Africa. Nothing like 'em in the garden world.

16-inch	.....	\$0.65 per doz.
30-inch	.....	1.50 per doz.
42-inch	.....	1.75 per doz.
66-inch	.....	2.85 per doz.
78-inch	.....	4.00 per doz.

Postage will be extra, but the size limitations may compel us to make shipment by express.



Help YOUR FLOWERS HOLD UP THEIR HEADS with PATENTED METAL **PLANT PROPS**

All heights shown are overall. Deduct 4' from 16 size and 6' from all other sizes for net height.

BAKED GREEN ENAMEL FINISH

78"  
66" 42" 30" 16"



# PLANTERS GUIDE

A vital question that is frequently asked. How large is an acre of land? Let's answer it right here.

5 yards by 968 yards.  
4840 square yards.  
60 feet by 726 feet.  
110 feet by 396 feet.

300 feet by 145.2 feet.  
43,560 square feet.  
From the above figures, you can figure any size piece of land.

Variety	Seed for 50 Ft.	Seed for 1 Acre Lb.	Rows Apart Feet	Plants Apart in Rows Inches	Planting Depth Inches	Days to Yield
Asparagus	1/2 oz. 30 plants	....	2 1/2	20	6	2 yrs.
Beans, Bush	4 ozs.	60 to 75	2 to 2 1/2	3 to 4	1 1/2	50 to 70
Beans, Pole	4 ozs.	30 to 35	3 to 4	9 (or hills)	1 1/2	65 to 80
Lima Beans, Bush	4 ozs.	30 to 50	2 to 2 1/2	3 to 4	1 1/2	65 to 75
Lima Beans, Pole	4 ozs.	30 to 40	3 to 4	9 (or hills)	1 1/2	80 to 90
Beet	1/2 oz.	4 to 6	1 1/2 to 2	3 to 4	1/2	60 to 75
Swiss Chard	1/2 oz.	....	2	15	1/2	50 and on
Broccoli	1 pkt.	1/4	2	18	1/4	70 to 80
Brussels Sprouts	1 pkt.	1/4	2	18	1/4	70 and on
Cabbage, Early	1 pkt.	1/4	2	12	1/4	65 to 75
Cabbage, Late	1 pkt.	1/4	2	18	1/4	80 to 100
Chinese Cabbage	1 pkt.	2	2	12	1/4	75 to 85
Carrot	1 pkt.	2 to 3	1 1/2	3	1/4	60 to 75
Cauliflower	1 pkt.	1/4	2	18	1/4	55 to 65
Celeriac	1 pkt.	1/4	2	4	1/8	90 to 120
Celery	1 pkt.	1/4	2 to 3	5	1/8	120 to 150
Collards	1 pkt.	....	2 1/2	24	1/4	90 and on
Sweet Corn, Early	1 oz.	8 to 10	2 1/2	9	1	70 to 80
Corn, Main Crop	1 oz.	8 to 10	3	12	1	80 to 95
Cucumber	1 pkt.	2	4	24	3/4	60 to 70
Eggplant	1 pkt.	1/4	3	30	1/2	70 to 85
Endive	1 pkt.	4 to 5	1 1/2	9	1/4	70 to 80
Kale	1 pkt.	4 to 5	2 1/2	24	1/4	70 to 80
Kohl-rabi	1 pkt.	4 to 5	2	8	1/4	55 to 65
Leek	1 pkt.	3 to 4	1 1/2	6	....	120 to 150
Lettuce, Leaf	1 pkt.	3	2	12	1/4	45 to 50
Lettuce, Head	1 pkt.	3	2	12	1/4	50 to 70
Muskmelon	1 pkt.	3 to 4	5	48	1	80 to 100
Mustard	1 pkt.	4	2	9	1/4	60 to 75
Okra	1/2 oz.	8	3	15	1	50 to 60
Onion, Seed	1 pkt.	3 to 4	1 1/2	3 to 4	1/2	90 to 100
Parsley	1 pkt.	4	1 1/2	4	1/4	85 to 100
Parsnip	1 pkt.	4	1 1/2	4	1/2	80 to 100
Peas	1/2 lb.	90 to 180	2 to 3	1 to 2	1	60 to 80
Pepper	1 pkt.	1/4	2 1/2	24	....	65 to 80
Pumpkin	....	3 to 4	8	60	1	110 to 130
Radish	1 pkt.	10 to 12	1	1 to 2	1/2	25 and on
Rhubarb	10 plants	2 to 3 for plants	4	48	1/4	2 to 3 yrs.
Salsify	1 pkt.	....	1 1/2	2	1/4	140 to 180
Spinach	1 pkt.	15 to 25	1 1/2	6	3/4	40 to 50
Spinach, N. Z.	1 pkt.	....	3	20	1	70 to 80
Squash, Bush	1 pkt.	6	4	36	1	55 to 65
Squash, Vining	1 pkt.	4	6	60	1	65 to 120
Tomato	1 pkt.	1/4	3 to 4	36	1/2	75 to 90
Turnip	1 pkt.	2 to 3	1 1/2	4 to 6	1/4	50 to 80
Rutabaga	1 pkt.	1 to 2	2	6	1/4	80 to 90
Watermelon	....	3 to 4	8	96	3/4	75 to 95

## NUMBER OF PLANTS TO THE ACRE AT GIVEN DISTANCES

Distance apart	No. plants	Distance apart	No. plants	Distance apart	No. plants
12 x 1 in.	522,720	24 x 24 in.	10,890	36 x 36 in.	4,840
12 x 3 in.	174,240	30 x 1 in.	209,088	42 x 12 in.	12,446
12 x 12 in.	43,560	30 x 6 in.	34,848	42 x 24 in.	6,223
16 x 1 in.	392,040	30 x 12 in.	17,424	42 x 36 in.	4,148
18 x 1 in.	348,480	30 x 16 in.	13,068	48 x 12 in.	10,890
18 x 3 in.	116,160	30 x 20 in.	10,454	48 x 18 in.	7,790
18 x 12 in.	29,040	30 x 24 in.	8,712	48 x 24 in.	5,445
18 x 18 in.	19,360	30 x 30 in.	6,970	48 x 30 in.	4,356
20 x 1 in.	313,635	36 x 3 in.	58,080	48 x 36 in.	3,630
20 x 20 in.	15,681	36 x 12 in.	14,520	48 x 48 in.	2,723
24 x 1 in.	261,360	36 x 18 in.	9,680	60 x 36 in.	2,901
24 x 18 in.	15,520	36 x 24 in.	7,260	60 x 48 in.	2,178

Approximate number of feet of row per acre at given distances:

Distance between rows:	18 inches	24 inches	30 inches	36 inches	42 inches	48 inches
Feet of row:	29,010	21,758	17,427	14,526	12,439	10,853



# PLEASE USE THIS ORDER SHEET

NAME \_\_\_\_\_ Date \_\_\_\_\_ 19 \_\_\_\_

Write very plainly

Forward Goods by .....  
(Parcel Post, Express, Freight or Boat)

## CASH DISCOUNT

Cash - - - - - \$

Discount does not apply on Canadian orders, and must be remitted in U. S. funds.

All of our seeds are tested, and we guarantee the vitality and purity to the full amount of the purchase price, but even with our quality seeds, success in gardening and farming depends largely upon cultivation, soil and weather conditions, therefore, in no case can we be held liable for more than the amount actually paid for the seeds.

[illegible]

IF MORE ORDER BLANKS ARE WANTED, WRITE US AND WE WILL SEND THEM. MAIL ORDERS ARE SOLICITED.



### ORDER SHEET — Continued

[illegible]

**SPECIAL NOTICE:** As a special favor, won't you tell your friends about your experience with our seeds? Give us their names and addresses so we may send them our seed annual.

[illegible]



From \_\_\_\_\_

R. F. D. or Box No. \_\_\_\_\_

P. O. \_\_\_\_\_

State \_\_\_\_\_

FIRST CLASS

Permit No. 698

(Sec. 34.9, P. L. & R.)

GRAND RAPIDS, MICHIGAN

**BUSINESS REPLY ENVELOPE**

NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

- POSTAGE WILL BE PAID BY -

**GRAND RAPIDS GROWERS, INC.**

**GRAND RAPIDS,**

**COR. WEALTHY AND IONIA AVE., S. W.**

**MICHIGAN**







# Flowers for Lasting Beauty

Perennial  
Gaillardia



Foxglove—Digitalis



Flowers of lasting beauty are the perennials. They bloom the second year, and every year thereafter with very little attention. We list only a few here, but you will find many more in the pages of this catalog. No garden is complete without a few of these choice flowers that come back year after year.

## AQUILEGIA

(COLUMBINE)

MRS. SCOTT ELLIOTT'S STRAIN OF LONG-SPURRED HYBRIDS. This beautiful plant thrives in all kinds of soil; graceful foliage. Flowers abundantly from early May until the last of June. See page 46.

## GAILLARDIA

(P)

Bloom from June to October. Their long flowering period, long stems and bright colors make these one of the most valuable perennials, being easily grown in beds and borders. See page 48.

## PYRETHRUM

(PAINTED DAISY) (P)

One of the most valuable of our early summer flowers. Charming colors and wonderful lasting properties as a cut flower. Flowers in May and June, and frequently in August and September; in all shades of rose and pink. Height 1 to 2 feet. See page 49.

## FOXGLOVE

(DIGITALIS) (B)

Bearing long spikes of beautifully colored flowers; fine for planting in hardy borders or among shrubbery. **Mixed.** See page 47.

Pyrethrum—Painted Daisy



Aquilegia—Columbine





## GRAND RIVER COLLECTION

## *of Choice Gladiolus*

Ten of each of the following ten representative varieties of Gladiolus including several of the higher priced ones (100 large size bulbs in all) will be sent to you **postpaid for only \$4.00**

**ELIZABETH THE QUEEN.** Giant ruffled lavender.

**ETHEL CAVE COLE.** Delicate pink.

**BUCKEYE BRONZE.** Smoky bronze.

**LADY JANE.** Large cream.

**LANTANA.** Vivid orange shades.

**RED CHARM.** Medium red. Very attractive.

**ROSA VAN LIMA.** Light rose with darker lines.

**SNOW PRINCESS.** A very fine white.

**SPOTLIGHT.** Deep yellow with red blotch.

**PURPLE SUPREME.** Bright purple.

The demand for these bulbs far exceeds our expectations every year, so we would suggest your early orders. Please allow us to substitute other varieties, if we are sold out when your order is received.

**Subject to 3% Michigan State Sales Tax**

**GRAND RAPIDS GROWERS Inc.** 401-433 Ionia Ave.  
Grand Rapids, Mich.